

MAJID SARRAFZADEH

Computer Science Department
UCLA
3532C Boelter Hall
Los Angeles, CA 90095
Phone: (310) 794-4303 Fax: (310) 794-5056
Email: majid@cs.ucla.edu
Home Page: <http://www.cs.ucla.edu/~majid/>
Research Lab: <http://er.cs.ucla.edu/>

EDUCATIONAL RECORD

University of Illinois at Urbana-Champaign
Department of Electrical and Computer Engineering
Bachelor of Science, 1982. Master of Science, 1984. Doctor of Philosophy, 1987.

WORK EXPERIENCE

- 1 **Computer Science Department, UCLA**
Distinguished Professor and
Director of Embedded and Reconfigurable Computing (ER) Laboratory
Courtesy appt: Electrical Engineering Department
Center of SMART Health, Co-director
BRITE center on Minority Health Disparities, Co-directors
UCLA Wireless Health Institute, Co-founder
- 2 **Department of Electrical and Computer Engineering, Northwestern University**
Assistant Professor (January of 1987-1991) Associate Professor (1991-1997)
Tenure (1993) Full Professor (1997-2000)
- 3 **Central Data Corporation**
Test Engineer (1982)
- 4 **IBM T.J. Watson Research Lab, Yorktown Heights**
Visiting Scientist for Physical Design (Summer 1988)
- 5 **Leonardo Fibonacci Institute for the Foundations of Computer Science, Trento, Italy**
Co-Invited Lecturer/Researcher lectured with (1991)
- 6 **IBM and a number of CAD companies**
Research collaboration and consulting (1990-2000)
- 7 **Motorola**
Research collaboration and consulting (1994-2000)
- 8 **Monterey Design Systems, (acquired by Synopsys in 2004)**
Consulting and one of three original architects (1997-2000)
- 9 **Motorola**

Sabbatical as architect and designer of a reconfigurable digital camera chip: defining their high-level design methodology (academic year 1997-1998)

- 10 **Hierarchical Design, Inc** (acquired by Xilinx in 2004)
Founder & Consultant (2001-2004)
- 11 **MediSens Wireless, Co-founder in 2007**
- 12 **Bruin Biometrics, Co-founder in 2009**
- 13 **WANDA, Founded in 2010** (Oncoverse: a join venture between WANDA and Dignity Health was acquired in 2017)

AREAS OF RESEARCH INTEREST

Embedded Medical Systems, Design and Analysis of Algorithms, Health Analytics.

EXPERT WITNESS EXPERIENCE

(Have listed only cases where I have written declarations and been deposed on it)

- *Cadence vs Avant! Corp.*, Case No. C95-20828 (N.D. Cal.), deposition testimony.
- *IKOS Systems, Inc. et al. v. Axis Systems, Inc.*, Case No. C 01-21079 (N.D. Cal.), deposition testimony.
- *Synopsys, Inc. v. Magma Design Automation, Inc.*, Case No. C 04-03923 (N.D. Cal.), deposition and **trial testimony**.
- *Intellectual Ventures I LLC et al. v. Xilinx, Inc. et al.*, No. 1:10-cv-01065-LPS (D. Del.) (Judge Leonard P. Stark), deposition testimony.
- *Mentor Graphics Corporation v. EVE-USA, Inc. et al.*, No. 3:10-cv-00954-MO (D. Or.) (Judge Michael Mosman), deposition and **trial testimony**; (and IPR)
- *Synopsys, Inc. v. Mentor Graphics Corp.*, No. 3:12-cv-06467-MMC (N.D. Cal.) (Judge Maxine M. Chesney), deposition testimony.
- *Altera Corp. v. PACT XPP Techs., AG*, No. 3:14-cv-02868-JD (N.D. Cal.) (Judge James Donato), deposition testimony.
- *Masa vs Apple, IPR, declaration and deposition testimony*
- *Jawbone vs Fitbit, ITC, deposition testimony*.
- *Immersion vs Apple, ITC, declaration and deposition testimony, and trial testimony*. (and IPR)
- *Vallencel vs Apple, IRP, Declaration and deposition testimony*

AWARDS/SOCIETIES

- 1 Member of Tau Beta Pi (National Engineering Honor Society) and Eta Kappa Nu (Electrical Engineering Honor Society)
- 2 Recipient of a 1987 NSF Engineering Initiation Award
- 3 Recipient of a 1988 Design Automation Library Award
- 4 Northwestern McCormick School of Engineering and Applied Sciences (MEAS) 1989/90 Faculty Teaching Honor Roll (given to best teachers)
- 5 Recipient of a 1991 Design Automation Library Award
- 6 Election to Senior Member Grade in IEEE (1992)
- 7 A number of Best Paper Awards and Distinguished paper awards (see detailed list of publication) e.g., in DAC-93 for "The Buffer Distribution Problem" (joint work with J.D. Cho)
- 8 Recipient of a 1994 ACM-SIGDA Scholarship Award (\$12,000)
- 9 Recipient of a 1995 ACM-SIGDA Scholarship Award (\$12,000)
- 10 **Fellow of IEEE** (1996) The citation reads: "For Contribution to Theory and Practice of VLSI Design"
- 11 Okawa Foundation Award.

EDITORIAL

- Editorial Board, Smart Health Journal, published by Elsevier 8/2016-present
- Founding Associate Editor (AE), IEEE Journal of Biomedical and Health Informatics (JBHI), 2014-present
- Guest editor, special issue CFP for the JBHI, "Emerging Wireless Body Area Networks (WBANs) for Ubiquitous Healthcare", 2015-present
- Associate Editor, Transactions on Information Technology in BioMedicine, 2012 – present.
- Editor of the Journal of Microprocessors and Microsystems (MICPRO) by Elsevier Science, 2012 – present.
- Associate Editor, IEEE Transactions on Information Technology in Biomedicine (TITB), 2009 - 2011
- Guest editor, Special issue on Wireless Health, ACM Transactions on Embedded Computing, 2008-2009
- Guest editor, Special issue on Wireless Health, IEEE Transactions on Information Technology in Biomedicine (TITB), 2008-2009
- Associate Editor, IEEE Transactions on Computer-Aided Design of ICAS (TCAD) July 1993-2003
- Associate Editor, ACM Transactions on Design Automation of Electronic Systems (TODAES) 2000-2005
- Editorial board, Journal of Embedded Computing (JEC) by Cambridge International Science Publishing, 2003-present
- Associate Editor, IEEE Transactions on Computers, 2003-2008
- Associate Editor, IEEE Transactions on VLSI, 2003-2005
- Editorial Board of JOLPE - Journal of Low Power Electronics 2005-present
- Editorial Committee of the Journal Engineering Letters at at:

<http://www.engineeringletters.com> 2005-present

- Editor, International Journal of Computer Applications in Technology (by UNESCO) 2000-present
- Advisory board, The CSI Journal on Computer Science and Engineering (CSIJCSE) 1999-present
- Editorial board, VLSI Design, 1995-2000
- Co-editor-in-chief, The International Journal of High-Speed Electronics, 1995-1999
- Editorial board, International Journals of Computer-Aided VLSI Design, 1989-1991

TECHNICAL COMMITTEES

- 1 Program committee of the First IEEE Great Lakes Symposium on VLSI, March 1991
- 2 Program committee of the Second Great Lakes Computer Science Conference, November 1991
- 3 Program committee of the IEEE International Conference on Computer-Aided Design (ICCAD-92)
- 4 Program committee of the IEEE International Symposium on Circuits and Systems (ISCAS-93)
- 5 Program committee of the IEEE International Conference on Computer-aided Design (ICCAD-93)
- 6 Program committee of the European Design Automation Conference (EDAC-94)
- 7 Program committee chair (layout and routing) of the IEEE International Conference on Computer-Aided Design (ICCAD-94)
- 8 Program committee chair (layout and routing) of the IEEE International Conference on Computer-Aided Design (ICCAD-95)
- 9 Program committee co-chair (CAD) of the IEEE International Symposium on Circuits and Systems (ISCAS-96)
- 10 Best-Paper-Award committee of the IEEE Transactions on Computer-Aided Design, 1996
- 11 Program committee of the 1997 Great Lakes Symposium on VLSI (GLSVLSI-97), University of Illinois, Urbana
- 12 Program committee of the 1997 European Design and Test Conference (ED & TC-97), Paris, France, March 1997
- 13 Program committee (CAD) of the IEEE International Symposium on Circuits and Systems (ISCAS-97)
- 14 Program committee chair of the 1997 International Symposium on Physical Design (ISPD-97)
- 15 Panelist for the 1997 NSF CAREER Awards (subject: Design Automation)
- 16 Best-paper-Award committee of the IEEE Transactions on Computer-Aided Design, 1997
- 17 Program committee of the 1998 Great Lakes Symposium on VLSI (GLSVLSI-98), Lafayette, LA
- 18 Program committee (CAD) of the IEEE International Symposium on Circuits and Systems (ISCAS-98)
- 19 Conference chair of the 1998 International Symposium on Physical Design (ISPD)
- 20 Best-Paper-Award committee of the IEEE Transactions on Computer-Aided Design, 1998
- 21 Program committee of the 1999 Great Lakes Symposium on VLSI (GLSVLSI-99), Ann Arbor, MI

- 22 Program committee of the 1999 Southwest Symposium on Mixed-Signal Design, April 11-13, Tucson, AZ
- 23 Program committee (CAD) of the IEEE International Symposium on Circuits and Systems (ISCAS-99)
- 24 Program committee of the Workshop on Reconfigurable Computing (WoRC'99) held in conjunction with PACT'99, October 12-16, Newport Beach, CA
- 25 Program committee (place and route) of the IEEE International Conference on Computer-Aided Design (ICCAD-99) Nov 7-11, San Jose, CA
- 26 Best-Paper-Award committee of the IEEE Transactions on Computer-Aided Design, 1999
- 27 General co-chair of the 2000 Great Lakes Symposium on VLSI (GLSVLSI-2000) Chicago, IL
- 28 Program committee of the International Symposium on Physical Design, April 2000, San Diego, CA
- 29 Chair of the steering committee of the International Symposium on Physical Design (ISPD) April 2000, San Diego, CA
- 30 Program committee of the 2000 Southwest Symposium on Mixed-Signal Design, February 28-29, San Diego, CA
- 31 Steering, special session chair and program committee of the Workshop on System Level Interconnect Prediction (SLIP-2000) San Diego, CA
- 32 Steering committee of the International Symposium on Quality of Electronic Design (ISQED-2000) March 21-22 2000, San Jose, CA
- 33 Program committee chair (routing subcommittee) of the IEEE International Conference on Computer-Aided Design (ICCAD-2000) Nov 5-9, San Jose, CA
- 34 Best-Paper-Award committee, IEEE Transactions on Computer-Aided Design, 2000
- 35 Steering committee of the International Symposium on Quality of Electronic Design (ISQED 2001) March 2000, San Jose, CA
- 36 Chair of the steering committee of the International Symposium on Physical Design (ISPD) April 2001
- 37 Program committee of the International Conference on VLSI Design, January 3-7, 2001, Bangalore, India
- 38 Program committee of the Advanced Research in VLSI, March 14-16, 2001, Utah
- 39 Program committee of the Design Automation Conference (DAC) June 2001, Las Vegas
- 40 Best-Paper-Award committee of the IEEE Transactions on Computer-Aided Design, 2001
- 41 Steering committee of the International Symposium on Quality of Electronic Design (ISQED) March 2001, San Jose, CA
- 42 Chair of the routing committee of the International Conference on Computer-Aided Design (ICCAD) November 2001, San Jose, CA
- 43 Steering committee of the International Symposium on Quality of Electronic Design (ISQED) March 2002, San Jose, CA
- 44 Program committee of the Design Automation Conference (DAC) June 2002, New Orleans, LA
- 45 Chair of the steering committee of the International Symposium on Physical Design (ISPD) April 2002, CA
- 46 Tutorial chair of the International Conference on Computer-Aided Design (ICCAD) November 2002, San Jose, CA
- 47 Executive committee of the International Conference on Computer-Aided Design (ICCAD 2002)
- 48 Program committee of the Asia-Pacific Design Automation Conference (ASP-DAC

- 2003) Japan
- 49 Program committee of Field Programmable Gate Arrays (FPGA 2003)
 - 50 Executive committee and the program vice-chair of the International Conference on Computer- Aided Design (ICCAD 2003)
 - 51 Steering committee of the International Symposium on Quality of Electronic Design (ISQED 2003) March 2003, San Jose, CA
 - 52 Program committee of DesignCon 2003, Santa Clara, CA
 - 53 Program committee of the Asia and South Pacific Design Automation Conference (ASP-DAC 2003)
 - 54 Technical program committee for the CODES-ISSS'03 Merged Conference, October 1-3, Newport Beach, CA
 - 55 Advisory board of the International Program Committee (IPC) for CST 2003 (<http://www.iasted.org/conferences/2003/cancun/cst.htm>)
 - 56 Program committee of the Asia-Pacific Design Automation Conference (ASP-DAC 2004) January 27-30, Minato-Mirai Yokohama
 - 57 Executive committee and program chair of the International Conference on Computer-Aided Design (ICCAD 2004)
 - 58 Steering committee of the International Symposium on Quality of Electronic Design (ISQED 2003), March 2004, San Jose, CA
 - 59 Technical program committee for the CODES-ISSS'04 Merged Conference September 8-10, Stockholm, Sweden
 - 60 Program committee of the International Symposium on Field-Programmable Gate Arrays (FPGA 2005) Monterey, CA
 - 61 Distinguished ISQED member (in the recognition of outstanding performance and lasting contributions to ISQED since the inception)
 - 62 Program committee member on the Third Workshop on Application Specific Processors (WASP 2004) September 8-10, Stockholm, Sweden
 - 63 Program committee member of the Design, Automation and Test Conference (DATE 2005) Munich, Germany
 - 64 General chair of the International Conference on Computer-Aided Design (ICCAD 2005).
 - 65 Program Committee member of UbiCare'06, the 1st workshop on Ubiquitous and Pervasive Health Care
 - 66 Program Committee member of Wireless Communications in Medical Applications (WCMA '07) Omaha, NE
 - 67 Program Committee member of the Seventh IASTED International Conferences on Wireless and Optical Communications (WOC 2007) May 31 – June 1, 2007, Montreal, Quebec, Canada
 - 68 Program Committee member of Joint Workshop on High Confidence Medical Devices, Software, and Systems (HCMDSS) and Medical Device Plug-and-Play (MD PnP) Interoperability, June 25 – 27, 2007, Boston, MA.
 - 69 Program Committee member of WSNHC 2007, the 1st workshop on Wireless Sensor Networks for Health Care. June 6, 2007, Braunschweig, Germany.
 - 70 Program committee, 2nd International Conference on Pervasive Computing, Technologies for Healthcare 2008, Tampere, Finland, January 30th - February 1st, 2008
 - 71 Program committee of Third International Conference on Body Area Networks March 13-17, 2008, Tempe, Arizona, USA
 - 72 Program committee of ICDC 2008, The Second International Conference on the Digital Society February 10-15, 2008 - Sainte Luce, Martinique
 - 73 General Chair, 1st International Workshop on TeleHealth, January 2008, Tampere,

- Finland
- 74 Program Committee, workshop on Software and Systems for Medical Devices and Services (SMDS 2007) in Dec 2007
- 75 Program Committee of Petra'08: International Conference on Pervasive Technologies Related to Assistive Environments, July 15-19, 2008, Athens, Greece.
- 76 TPC Chair, BodyNets 2009, Los Angeles, CA
- 77 Technical Program Committee for the 2010 International Conference on Body Sensor Networks (BSN 2010)
- 78 Technical Program Committee: eTELEMED 2010, The Second International Conference on eHealth, Telemedicine, and Social Medicine in St. Maarten - Netherlands Antilles, February 10-15, 2010
- 79 Technical Program Committee: Pervasive Technologies Related to Assistive Environments - PETRA 2010 Samos, Greece, June 23-25, 2010.
- 80 Technical Program Committee: eTELEMED 2011, The third International Conference on eHealth, Telemedicine, and Social Medicine
- 81 Technical Program Committee-Chair, MobiHealth 2011-First ACM MobiHoc Workshop on Pervasive Wireless Healthcare Paris, France May 16-20, 2011
- 82 Co-Chair of IADIS Multi Conference on Computer Science and Information Systems (MCCIS 2011) Rome, Italy July 20-26, 2011
- 83 Program Chair of 2011 ACM SIGHIT International Health Informatics Symposium (IHI 2011) Miami, Florida on November 9-11, 2011
- 84 Program Committee of CIMTEC 2012 4th International conference "Smart Materials, Structures and Systems" Montecatini Terme, Italy on June 10-15 2012
- 85 Technical Program Committee: eTELEMED 2012, The International Conference on eHealth, Telemedicine, and Social Medicine
- 86 Technical Program Committee: The 9th International Conference on Wearable and Implantable Body Sensor Networks (BSN) London, UK, May 10-12 2012
- 87 Steering Committee: MobiHoc 2012, the Thirteenth International Symposium on Mobile Ad Hoc Networking and Computing at Hilton Head Island, South Carolina, June 11-14 2012
- 88 Program Committee: IADIS International Conference, e-Health 2012 at Lisbon, Portugal, July 17-19 2012
- 89 Steering Committee: MobileHealth 2012: Second ACM MobiHoc Workshop on Pervasive Wireless Healthcare, South Carolina, USA, June 11 2012
- 90 Program Committee: GLOBAL HEALTH 2012, The First International Conference on Global Health Challenges, Venice, Italy, October 21-26 2012
- 91 **Founding Member** of Wireless Health conference.
- 92 Steering committee and Technical program committee of Wireless Health 2010 – 2012.
- 93 Program committee: PETRA 2013 The 6th International Conference on Pervasive Technologies Related to Assistive Environments, island of Rhodes, Greece 05/29/13-05/31/13
- 94 Program committee: 10th Body Sense Network Conference (BSN), Cambridge, USA, May 6-9 2013.
- 95 Program committee: IADIS INTERNATIONAL CONFERENCE E-HEALTH 2013, Prague, Czech Republic, 24 - 26 July 2013
- 96 Steering Committee of MobileHealth workshop, Bangalore, India July 2013.
- 97 Technical Program Committee: IEEE HealthCom 2013 15th International Conference on E-Health Networking, Application & Services Lisbon, Portugal, October 9-12 2013
- 98 Technical Program Committee: SENSORDEVICES, August 25 - 31, 2013 - Barcelona, Spain

- 99 Technical Program Committee: ICHI 2013 - IEEE International Conference on Healthcare Informatics 2013, 09 Sep - 11 Sep, Philadelphia, PA, USA.
- 100 Technical Program Committee of Wireless Health 2013, Baltimore, MD November 1-3, 2013.
- 101 Program Committee: AMBIENT 2013, The Third International Conference on Ambient Computing, Applications, Services and Technologies, Porto, Portugal, September 29 – October 3 2013
- 102 Program Committee: GLOBAL HEALTH 2013, The Second International Conference on Global Health Challenges, Lisbon, Portugal, November 17-22 2013
- 103 Program Committee: Brain/Health Informatics 2013 (BHI'13), October 29-31 2013, Maebashi, Japan
- 104 Technical Program Committee: The 2014 International Conference on Wearable and Implantable Body Sensor Networks (BSN 2014), Zurich, Switzerland, June 16-20 2014
- 105 Program Committee: International Conference on Healthcare Informatics 2014 (ICHI), Verona, Italy, September 15-17, 2014
- 106 Program Committee: International Advisory Board of Symposium "Progress in Wearable/Wireless and Implantable Body Sensor Networks for Healthcare Applications" CIMTEC 2016, Perugia, Italy June 5-10, 2016
- 107 Steering Committee: IEEE CHASE 2016 (2016 the IEEE 1st International Conference on Connected Health: Applications, Systems and Engineering Technologies), Washington D.C, June 27-29 2016
- 108 Technical Program Committee: IEEE CHASE 2016 (2016 the IEEE 1st International Conference on Connected Health: Applications, Systems and Engineering Technologies), Washington D.C, June 27-29 2016
- 109 Program Committee Member: The First Workshop on Data Mining for Internet of Things (DMIOT 2016), Barcelona, Spain, December 12 2016

University Committees (UCLA) Since 2010

- Committee on Undergraduate Admissions and Relations with Schools (2017 – 2020)
- Recruiting Committee Chair, Computer Science, 2015-16.
- Field Chair for Architecture for 2010-2013, and served in the
- By-Law 55 committee 2010-2012, 2014.
- UCLA Mobile Steering Committee (2015)
- UCLA RISP Board (Research Informatics Strategic Plan), 2014

STUDENTS

A. Undergraduate Students

Many students have worked in my research group since 1987. They have been involved in design, analysis and implementation of algorithms for Embedded Systems and Wireless Health. They have been supported e.g., by REU grants from NSF (i.e., Research Experience for Undergraduates by the National Science Foundation), Motorola and other companies.

B. Master Students

At Northwestern University and UCLA there have been more than 100 students who have received their M.S. degree under my supervision. They are either working toward their Ph.D. degree or are working in industry.

C1. Ph.D. Students in Academia

Ph.D. Alumni in Academia		
1. Jun Dong Cho	PhD 1993	Chair, Dept. of Human ICT Convergence Professor, Dept. Electronic Engineering SungKyunKwan University, Korea
2. Weiliang Lin	PhD 1995	Professor (EE), National Chung Hsing University, Taiwan
3. De-Sheng Chen	PhD 1995	Professor (IECS), Feng Chia University, Taiwan
4. Kia Bazargan	PhD 2000	Associate Professor (ECE), University of Minnesota, USA
5. Ankur Srivastava	PhD 2002	Associate Professor (ECE), University of Maryland, USA, Full Professor 5-2014
6. Ryan Kastner	PhD 2002	Associate professor (CS), University of California, San Diego, USA
7. Seda O Memik	PhD 2003	Associate Professor (ECE), Northwestern University, USA
8. Elaheh Bozorgzadeh	PhD 2003	Associate Professor (CS), University of California, Irvine, USA
9. Soheil Ghiassi	PhD 2004	Associate professor (ECE), University of California, Davis, USA
10. Roozbeh Jafari	PhD 2006	Associate Professor BME, CSE and ECE at Texas A&M, USA
11. Philip Brisk	PhD 2006	Associate Professor (CS) University of California, Riverside, USA
12. Ani Nahapetian	PhD 2007	Associate Professor, California State University, Northridge
13. Tammara Massey	PhD 2009	Johns Hopkins University / Applied Physics Laboratory
14. Jamie MacBeth	PhD 2010	Assistant Professor (CS), Fairfield University

15. Diane Myung-kyung Suh	PhD 2012	Assistant Professor, University of San Francisco, Dept of Analytics
16. Navid Amini	PhD 2012	Research Assistant Professor, UCLA ophthalmology
17. Wenyao Xu	PhD 2013	Assistant Professor (Computer Science & Engineering) University of New York at Buffalo
18. Bobak Mortazavi	PhD 2014	Assistant Professor- Texas A&M CS
19. Sunghoon Lee	PhD 2014	Assistant Professor- UMass Amherst CS
20. Ming-Chun (John) Huang	PhD 2014	Assistant Professor- Case Western Reserve University, CS and EE
21. Nabil Alsurafa	PhD 2015	Assistant Professor – Northwestern University, Dept of Preventive Medicine and Computer Science

C2. Ph.D. Students in Industry

Ph.D. Alumni in Industry		
1. R. D. Lou	PhD 1990	
2. Charles Chiang	PhD 1991	Synopsys
3. Jaosn K. F. Liao	PhD 1991	Mentor
4. Gary K. H. Yeap	PhD 1993	Synopsys
5. Salil Raje	PhD 1996	Xilinx
6. Gustavo Tellez	PhD 1996	IBM
7. Amir Farrahi	PhD 1996	Sun
8. James Crenshaw	PhD 1998	Motorola
9. Maogang Wang	PhD 2000	Blaze-DFM

10. Xiaojian Yang	PhD 2002	Synplicity
11. B. K. Choi	PhD 2004	Magma
12. Taraneh Taghavi	PhD 2007	IBM
13. Foad Dabiri	PhD 2009	Google
14. Hyduke Noshadi	PhD 2012	Google
15. Mahsan Rofouei	PhD 2012	Google
16. Jonathan Woodbridge	PhD 2012	Sandia National Laboratories
17. Diane Myung-kyung Suh	PhD 2012	Sandia National Laboratories
18. Alireza Vahdatpour	PhD 2010	Microsoft
19. Mars Lan	PhD 2013	Google
20. Maryam Moazeni	PhD 2013	Microsoft
21. Jason Liu	PhD 2014	Northrop Grumman- Software Engineer
22. Konstantinos Sideris	PhD 2016	Facebook
23. Lauren Samy	PhD 2016	TBD
24. Haik Kalantarian	PhD 2016	Brain of Things

D. Current Ph. D. Students

1. Ebrahim Nemati
2. Babak Moatamed
3. Anahita Hosseini
4. Migyeong Gwak

5. Sajad Darabi
6. Mohammad Kachuee

E. POSTDOCS/Asst Researcher (A few examples)

NAME	YEAR	CURRENT POSITION
Kevin Bouchard	11/15-7/16	Tenture position, Université du Québec à Chicoutimi-Département d'informatique et de mathématiques
Christine King (Asst Project Scientist V)	10/15	
Young Soo Suh (Asst Visiting Researcher)	2/15-1/31/16	
Ramin Ramezani (Asst Researcher III)	11/14-11/22/15	Technical Managing Director of CTSI
Mohammad Pourhomayoun	9/13-10/1/16	Assistant Professor, Cal State LA
Eun Jeong Park (Visiting Scholar)	1/2013-3/2015	Chair of Health IT at Yonsei University
Hassan Ghasemzadeh (Asst Researcher)	9/2011-12/2013	Assistant Professor, Washington State University
Atshushi Takahashi		Professor, Tokyo Inst of Technology
Chunhong Chen		Professor, Univ of Windsor
Ben Carrion Schafer	2008-2009	Professor, UT Dallas

F. Awards Received by my PhD Students

NAME	YEAR	AWARD
Haik Kalantarian	2016	Edward K. Rice Outstanding Doctoral Students (given to one UCLA engineering student each year)
Anahita Hosseini	2016	Best Poster Award at the 2016 Body Sensor Networks Conference, SF, CA. "HIPAA Compliant Wireless Sensing Smartwatch Application for the Self-Management of Pediatric Asthma"
Haik Kalantarian	2016	Northrop-Grumman Outstanding Student Research Award
Nabil Alshurafa	2015	Symantec Outstanding Graduate Student Award in Computer Science
Nabil Alshurafa	2015	Outstanding Doctor of Philosophy in Computer Science
Sunghoon Lee	2014	Northrup-Grumman Outstanding Research Student Award
Jason Liu	2013	Best Paper Runner up "On-bed Monitoring for Range of Motion Exercises with a Pressure Sensitive Bedsheet"
Navid Amini	2013	2012-2013 Google Outstanding Graduate Student Award

Mahsan Rofouei	2012	Edward K. Rice Outstanding Doctoral <i>Students</i> (given to one UCLA engineering student each year)
Mahsan Rofouei	2012	UCLA Computer Science Outstanding Graduate Student Research Award (Sponsored by Google)
Mahsan Rofouei	2012	Runner up Best Paper Award at The 9th International Conference on Wearable and Implantable Body Sensor Networks (BSN)
Bobak Mortazavi	2012	Best Demo Award, 9th international conference on wearable and implantable body sensor networks.
Navid Amini	2011	Symantec Outstanding Graduate Student Research Award
Navid Amini	2011	Outstanding Project Award – Bruin innovation & Technology Magazine (BIT)
Ming-Chun Huang	2011	Best Demo Award – Wireless Health Conference in San Diego, Oct. 2011
Wenyao Xu	2011	Best Contributor Award in Bruin Innovation & Technology
Jonathan woodbridge	2009-2012	NLM's University-based Biomedical Informatics Research Training Fellowship
Myung-kyung Suh	2009-2012	NIH/National Library of Medicine Medical Informatics Training Program Fellowship
Hyduke Noshadi	2010	Outstanding graduate student research award
Foad Dabiri	2008	Edward K. Rice Outstanding Doctoral Student Award (given to one PhD student at UCLA)
Hyduke Noshadi	2008	Best Paper Award Ubiquitous Personal Assistive System for Neuropathy, (HealthNet)
Hyduke Noshadi	2007	Outstanding masters student award
Ani Nahapetian	2004	Edward K. Rice Outstanding Masters Student Award (given to one MS student at UCLA)

TEACHING

My teaching philosophy and method can be classified as an “Intuitive and rigorous lecturing along with active method of learning”. I believe lecture should be intuitive to make it accessible to students and encourage them to learn more. I also believe lectures should be related to real world and everyday issues. My teaching methods enhance intuitive and rigorous lecturing with active learning. Meyers and Jones (1993) define active learning as learning environments that allow students to talk and listen, read, write, and reflect as they approach course content through problem-solving exercises, informal small groups, simulations, case studies, and other activities -- all of which require students to apply what they are learning. Many studies show that learning is enhanced when students become actively involved in the learning process. Instructional strategies that engage students in the learning process stimulate critical thinking and a greater awareness of other perspectives. Although there are times when lecturing is the most appropriate method for disseminating information, I believe that the use of a variety of instructional strategies can positively

enhance student learning.

I take teaching very seriously. I devoted a major portion of my time working with my undergraduate and graduate students, as evident from the large number of publications produced with my students. In 2006 I completely redesigned CS 152 A/B: two major design courses in the departments. I have updated these courses every year ever since. I have also included undergrad students in my research group. I teach two core undergraduate courses; Algorithms and Complexity (CS 180) and a series of graduate courses in the area of embedded systems and Wireless Health. My teaching evaluation average since I have joined UCLA is 8.21 compared with departmental average of 7.56 (At Northwestern, my teaching evaluations have averaged (around) **3.7** (on scale of 1 to 4).

CS 152A lab involves of implementing digital logic designs and applying concepts students learned in CS 51A. The specific objectives of the course is to instruct students learning how to use discrete components, breadboards, oscilloscopes, voltmeters, data sheets, and instruction manuals under digital laboratory environment. Students are expected to be able to collaboratively design digital systems with their partners and implement their designs with a schematic editor, VHDL, and FPGA.

CS152B covers advanced digital design techniques using Xilinx FPGA platforms. Students develop structural and behavior RTL code, perform simulations, and synthesize their designs onto FPGAs for evaluation. Four progressively challenging laboratory assignments cover fundamental hardware concepts such as finite state machines, register files, ALUs, and video standards. The course also emphasizes collaborative group work, testbench development, and technical documentation. The course was significantly revised again in 2013. The previous Xilinx XUPV2P boards were upgraded to Virtex5-based development platforms, which support many more peripherals. This allows new labs/projects to emphasize a greater range of embedded systems applications, rather than focusing on a camera-based project.

Sample CS152 B Final Projects:

1. An autonomous robot capable of navigating on a path set by a colored line using image processing.
2. An FPGA-based atari emulator with DVI output, an analog joystick, and buttons.
3. An iRobot-based robot that is capable of reacting to external sound, and moves towards the source.
4. Accelerometer-based implementation of a Wii remote using a VmodCAM camera.

I also teach courses in Design and Analysis of Algorithm and graduate courses in Wireless Health.

PATENTS

1. Methods for design optimization using logical and physical information (09,097,299)

- Filed June 1998, Granted March 2001.
2. System and method for concurrent placement of gates and associated wiring (6,385,760) Filed June 1998, Granted May 2002.
3. Placement method for integrated circuit design using topo-clustering (6,442,743) Filed June 12, 1998, Granted August 27, 2002.
4. Method and system for progressive clock tree or mesh construction concurrently with physical design (6,651,232) Filed November 5, 1998, Granted November 18, 2003.
5. Placement method for integrated circuit design using topo-clustering (6,851,099) Filed 2/23/2000, Granted 2/1/05.
6. Foot pressure alert and sensing system (US 7726206 B2), Priority date Nov 2006; Granted June 1, 2010.
7. SEM scanner sensing apparatus, system and methodology for early detection of ulcers, Australian patent No AU2011253253, Bates-Jensen, B., Boystak, J., Flesch, M., Kaiser, W., Lam, Y., Mehrnia, A., Sarrafzadeh, M., Wang, F. Filed and accepted 6/5/11.
8. Method and Apparatus for Quantitative Assessment of Neuromotor Disorders (8,845,554) filed 8/26/09, Granted 9/30/14.
9. SEM Scanner Sensing Apparatus, System and Methodology for Early Detection of Ulcers, Application No 20140288397, Sarrafzadeh, M., Kaiser, W., Mehrnia, A., Bates-Jensen, B., Wang, F., Flesch, M., Boystak, J., Lam, Y. Sept 25, 2014.
10. Method of Assessing Human Fall Risk Using Mobile Systems (13/378,937) filed 12/16/11, Granted September 2014.
11. Distributed External and Internal Wireless Sensor Systems for Characterization of Surface and Subsurface Biomedical Structure and Condition, Granted Japanese Patent No. 5774590.
12. Apparatus and method for implementing a mobility aid device (8,974,232) filed 3/3/09, granted March 10, 2015.
13. Fabric-Based Pressure Sensor Arrays and Methods for Data Analysis, US Patent Application No. 13/475,654, Sarrafzadeh, M., Xu, W., Huang, M., Raut, N., Yadegar, B., October 26, 2015.
14. SEM Scanner Sensing Apparatus, System and Methodology for Early Detection of Ulcers, Patent No. 9,220,455 Filed 6/6/14, issued 12/29/15
15. Apparatus, Systems, and Methods for Tissue Oximetry and Perfusion Imaging, Application No: 2012207287, Patent Application in Australia, Accepted 30 November 2015
16. On-Bed Monitoring System for Range of Motion Exercises With A Pressure Sensitive bed Sheet, US Patent Application No.: 14/101,765, Sarrafzadeh, M., Xu, W., Huang, M., Liu, J., publication date June 12, 2014.
17. Context-Aware Prediction In Medical Systems, UCLA 2012-765-2-LA, U.S. Patent Application Serial No. 14/276,660, Ghasemzadeh, H., Suh, M.K., Lan, M., Sarrafzadeh, M., Alshurafa, N., issued on September 5, 2017 as Patent No. 9,754,08
18. Efficient Searching of Stationary Dataset, U.S. Patent No. 9,659,044, Sarrafzadeh, M., Woodbridge, J., issued May, 23, 2017.
19. APPARATUS, SYSTEM, AND METHOD FOR DETECTING ACTIVITIES AND ANOMALIES IN TIME SERIES DATA, August 2017, Inventors: Majid Sarrafzadeh et al.
20. DEVICES, SYSTEMS, AND METHODS FOR MONITORING, CLASSIFYING, AND ENCOURAGING ACTIVITY U.S. Patent Application No. 14/387225 Filed: September 22, 2014, Granted November 2017, Inventors: Majid Sarrafzadeh et al.
21. ENERGY AWARE SENSOR MANAGEMENT FOR WEARABLE MEDICAL SYSTEMS OPTIMIZATION, Inventors: Majid Sarrafzadeh, Miodrag Potkonjak, Foad

PUBLICATIONS

I. Books

1. Sarrafzadeh, M., and Lee, D.T., "Algorithmic Aspects of VLSI Layout", Lecture Notes Series on Computing, World Scientific Publishing Company, Singapore, (1993)
2. Sarrafzadeh, M., and Wong, C.K., "An Introduction to VLSI Physical Design", McGraw Hill Publishing, pp. 1-334 (1996)
3. M. Sarrafzadeh, M. Wang, X. Yang, Modern Placement Techniques, Kluwer, 2002
4. Kastner, R., Kaplan, A., Sarrafzadeh, M., "Synthesis Technique and Optimizations for Reconfigurable Systems", Springer, pp. 1-256 (2003)

II. Book Chapters

1. Yang, X., E. Bozorgzadeh, M. Sarrafzadeh and M. Wang, "Modern Standard-Cell Placement Techniques", In: In Layout Optimization in VLSI Design, Kluwer Academic Publishers, (January 2002)
2. Bozorgzadeh, E., R., Kastner, S.O. Memik, M. Sarrafzadeh,, "Strategically Programmable Systems", In: The Computer Engineering Handbook, CRC Press, (December 2001)
3. Srivastava, A., Sobaje, J., Potkonjak, M., Sarrafzadeh, M., "Optimal Node Scheduling for Effective Energy Usage in Sensor Networks", In: System-Level Power Optimization for Wireless Multimedia Communication, Kluwer Academic Publishers, (2002)
4. Bozorgzadeh, E., A. Kaplan, R. Kastner, S. Ogreneci Memik and M. Sarrafzadeh, "Optimization for Reconfigurable Systems Using Hierarchical Abstraction", In: Multi-level Optimization and VLSI CAD, Eds. J. Cong and J. R. Shinnerl (Eds.), Kluwer Academic Publishers, Boston, (2002)
5. Dabiri, F., Jafari, R., Massey, T., Nahapetian, A., Sarrafzadeh, M., "Lightweight Embedded Systems", In: Computer Engineering Handbook, Oklobdzija, V. (Ed.), Taylor and Francis/CRS Press, 16:16 – 20
6. Brisk, P., Sarrafzadeh, M., "Resource Sharing During Datapath Generation and Custom Instruction Set Synthesis", In: in Customizable Embedded Processors: Design Technologies and Applications, Elsevier, (Eds.) P. Ienne and R. Leupers, to appear (Eds.), (2006)

7. Massey, T., Dabiri, F., Jafari, R., Noshadi, Brisk, P., Sarrafzadeh, M., "Handbook of Research on Distributed Medical Informatics and E-Health", Lazakidou, A., Siassiakos, K., (Eds.), 228-240 (2009)

III. Journal Papers

8. M. Sarrafzadeh and F. P. Preparata, "Compact Channel Routing of Multiterminal Nets," *Annals of Discrete Mathematics: Journal of Mathematics Studies*, Vol. 25, April 1985, pp. 255-279.
9. K. Mehlhorn, F. P. Preparata and M. Sarrafzadeh "Channel Routing in Knock-Knee Mode: Simplified Algorithms and Proofs," *Algorithmica*, Vol. 1, No.2, October 1986, pp. 213-221.
10. S. W. Hornick and M. Sarrafzadeh, "On Problem Transformability in VLSI," *Algorithmica*, Vol. 2, No. 1, April 1987, pp. 97-111.
11. M. Sarrafzadeh, "Channel Routing in the Knock-Knee Mode is NP-Complete," *IEEE Transactions on Computer-Aided Design*, Vol. CAD-6, No. 4, July 1987, pp. 503-506.
12. G. Bilardi and M. Sarrafzadeh, "Optimal VLSI Circuit for Discrete Fourier Transform," *Advances in Computing Research*, Vol. 4, (F. P. Preparata ed.), JAI Press Inc., 1987, pp. 87-101.
13. M. Sarrafzadeh, "Channel Routing with Provably Short Wires," *IEEE Transactions on Circuits and Systems (Letters)*, Vol. CAS-34, No. 9, September 1987, pp. 1133-1135.
14. F.P. Preparata and M. Sarrafzadeh, "A Bottom-up Layout Technique Based on Two Rectangle Routing," *INTEGRATION: The VLSI Journal*, Vol. 5, 1987, pp. 231-246.
15. M. Sarrafzadeh and D. T. Lee, "A New Approach to Topological Via Minimization," *IEEE Transactions on Computer-Aided Design*, Vol. 8, No. 8, August 1989, pp. 890-900.
16. M. Brady and M. Sarrafzadeh "Stretching a Knock-knee Layout for Multilayer Wiring," *IEEE Transactions on Computers*, Vol. 39, No. 1, January 1990, pp. 148
17. C.C. Su and M. Sarrafzadeh, "Optimal Gate-matrix Layout of CMOS Functional Cells," *INTEGRATION: The VLSI Journal*, January 1990, pp. 3-23.
18. J. M. Ho, M. Sarrafzadeh, G. Vijayan and C. K. Wong, "Pad Minimization for Planar Routing of Multiple Power Nets," *IEEE Transactions on Computer-Aided Design*, Vol. 9, No. 4, April 1990, pp. 419-426.
19. K.F. Liao, D.T. Lee, and M. Sarrafzadeh, "Planar Subset of Multiterminal Nets," *INTEGRATION: The VLSI Journal*, No. 1, Vol. 10, Sep. 1990, pp. 19-37.
20. M. Sarrafzadeh, "Area Minimization in a Three-sided Switchbox by Sliding the

- Modules,” IEEE Transactions on Computers, Vol. 39, No. 11, November 1990, pp. 1395-1398.
21. M. Sarrafzadeh and D. Zhou, “Global Routing of Short Nets in Two-Dimensional Arrays,” The International Journal of Computer Aided VLSI Design, (Special issue: Placement and Routing), Vol. 2, No. 2, 1990, pp. 197-211.
 22. D. T. Lee, M. Sarrafzadeh and Y. F. Wu, “Minimum Cuts for Circular Arc Graphs,” SIAM Journal on Computing, Vol. 19, No. 6, December 1990, pp. 1041-1050.
 23. J. M. Ho, M. Sarrafzadeh, G. Vijayan and C. K. Wong, “Layer Assignment for MultiChip Modules,” IEEE Transactions on Computer-Aided Design, Vol. 9, No. 12, December 1990, pp. 1272-1277.
 24. C. Chiang, M. Sarrafzadeh and C. K. Wong, “Global Routing Based on Steiner Min-Max Trees,” IEEE Transactions on Computer-Aided Design, Vol. 9, No. 12, December 1990, pp. 1318-1325.
 25. M. Sarrafzadeh, A. Katsaggelos and S. P. Kumar, “Parallel Architectures for Iterative Image Restoration,” A chapter in parallel algorithms and architectures for digital signal processing (M. Bayoumi, editor) Kluwer Academic Publishers, 1991, pp. 1-31.
 26. M. Sarrafzadeh, “Tree Placement in Cascode-Switch Macros,” INTEGRATION: The VLSI Journal, Vol. 11, March 1991, pp. 127-139.
 27. C. Chiang and M. Sarrafzadeh, “Wirability of Knock-knee Layouts with 45-degree Wires,” IEEE Transactions on Circuits & Systems, Vol. 38, No. 6, June 1991, pp. 613-624.
 28. M. Sarrafzadeh and D. T. Lee, “Topological Via Minimization Revisited,” IEEE Transactions on Computers, Vol. 40, No. 11, November 1991, pp. 1307-1312.
 29. K. F. Liao and M. Sarrafzadeh, “Boundary Single-Layer Routing with Movable Terminals,” IEEE Transactions on Computer-Aided Design, Vol. 10, No. 11, November 1991, pp. 1382-1391.
 30. C. Chiang, M. Sarrafzadeh and C. K. Wong, “An Optimal Algorithm for Rectilinear Steiner Trees for Channels with Obstacles,” International Journal of Circuit Theory and Application, (John Wiley & Sons) Special issue: Fundamental methods in computer-aided circuit design, Vol. 19, No. 6, December 1991, pp. 551-563.
 31. M. Sarrafzadeh and C. K. Wong, “Bottleneck Steiner Trees in the Plane,” IEEE Transactions on Computers, Vol. 41, No. 3, March 1992, pp. 370-374.
 32. R. D. Lou, M. Sarrafzadeh and D. T. Lee, “An Optimal Algorithm for the Maximum Two-chain Problem,” SIAM Journal on Discrete Mathematics, Vol. 5, No. 2, May 1992, pp. 284-304.
 33. N. Sherwani, Bo Wo and M. Sarrafzadeh, “Algorithms for Minimum-Bend Single Row Routing Problem,” IEEE Transactions on Circuits & Systems, (I: Fundamental Theory

- and Applications), Vol. 39, No. 5, May 1992, pp. 412-415.
34. J. Cong, A. Kahng, G. Robins, M. Sarrafzadeh and C. K. Wong, "Provably Good Performance Driven Global Routing," IEEE Transactions on Computer-Aided Design, Vol. 11, No. 6, June 1992, pp. 739-752.
 35. M. Sarrafzadeh and R. D. Lou, "Maximum k-Coverings of Weighted Transitive Graphs with Applications," Algorithmica, Vol. 9, No. 1, pp. 84-100.
 36. A. Katsaggelos, S.P. Kumar and M. Sarrafzadeh, "VLSI Architectures for Iterative Image Restoration Algorithms," Journal of Circuits, Systems and Computers, Vol. 2, No. 3, September 1992, pp. 265-280.
 37. R. D. Lou and M. Sarrafzadeh, "Circular Permutation Graph Family with Application," Discrete Applied Mathematics, (special issue on: Discrete Algorithms and Complexity) Vol. 40, 1992, pp. 433-457.
 38. R. D. Lou, K. F. Liao and M. Sarrafzadeh, "Planar Routing Around One Rectangle," Journal of Circuits, Systems and Computers, (World Scientific Publishing), Vol. 2, No. 1, 1992, pp. 27-38.
 39. Y. M. Huang and M. Sarrafzadeh, "A Parallel Algorithm for Minimum Dual Cover with Application to CMOS Layouts," Journal of Circuits, Systems and Computers, (World Scientific Publishing) Vol. 1, No. 2, pp. 177-204.
 40. M. Sarrafzadeh and C. K. Wong, "Hierarchical Steiner Tree Construction in Uniform Orientation," IEEE Transactions on Computer-Aided Design, Vol. 11, No. 8, September 1992, pp. 1095-1103.
 41. R. D. Lou, M. Sarrafzadeh, C. S. Rim, S. Masuda and K. Nakajima, "General Circular Permutation Layout," Mathematical Systems Theory, Vol. 25, 1992, pp. 269-292.
 42. Y. Sun and M. Sarrafzadeh, "Floorplanning by Graph Dualization: L-shaped Modules," Algorithmica, Vol. 10, No. 6, 1993, pp. 429-456.
 43. J. M. Ho, A. Suzuki and M. Sarrafzadeh, "An Exact Algorithm for Single-Layer Wire Length Minimization," IEEE Transactions on Computer-Aided Design, Vol. 12, No. 1, January 1993, pp. 175-180.
 44. C. Chiang, M. Sarrafzadeh and C. K. Wong, "An Algorithm for Exact Rectilinear Steiner Trees for Switchboxes with Obstacles," IEEE Transactions on Circuits & Systems, (I: Fundamental Theory and Applications), Vol. 39, No. 6, pp. 446-455.
 45. K. H. Yeap and M. Sarrafzadeh, "Floorplanning by Graph Dualization: Two-concave Rectilinear Modules," SIAM Journal on Computing, Vol. 22, No. 3, June 1993, pp. 500-526.
 46. Nancy Holmes, Naveed Sherwani and M. Sarrafzadeh, "Utilization of Vacant Terminals for Improved Over the Cell Routing," IEEE Transactions on Computer-Aided Design, Vol. 12, No. 6, June 1993, pp. 780-792.

47. D. T. Lee and M. Sarrafzadeh, "Maximum Independent Set of a Permutation Graph in K Tracks," *International Journal of Computational Geometry and Application*, Vol. 3, No. 3, September 1993, pp. 291-304.
48. K. H. Yeap and M. Sarrafzadeh, "Net-Regular Placement for High Performance Circuits," *International Journal of High Speed Electronics*, Vol. 4, No. 3, October 1993.
49. R. D. Lou and M. Sarrafzadeh, "An Optimal Algorithm for the Maximum Three-Chain Problem," *SIAM Journal on Computing*, Vol. 22, No. 5, October 1993, pp. 976-993.
50. K. H. Yeap and M. Sarrafzadeh, "A Unified Approach to Flooplan Sizing and Enumeration," *IEEE Transactions on Computer-Aided Design*, Vol. 12, No. 12, December 1993, pp. 1858-1867.
51. J. D. Cho, M. Sarrafzadeh, M. Sriram and S. M. Kang, "High-Performance MCM Routing," *IEEE Design and TEST*, December 1993, pp. 27-37.
52. M. Sarrafzadeh and D. T. Lee, "Restricted Track Assignment with Application," *International Journal of Computational Geometry and Application*, Vol. 4, No. 1, 1994, pp. 53-68.
53. K. F. Liao, M. Sarrafzadeh and C. K. Wong, "Single-layer Global Routing," *IEEE Transactions on Computer-Aided Design*, Vol. 13, No. 1, pp. 38-47.
54. J. D. Cho and M. Sarrafzadeh, "The Pin Redistribution Problem in Multi-Chip Modules," *Mathematical Programming, Series B*, Vol. 63, February 1994, pp. 297-330.
55. C. Alpert, G. Robins, J. Cong, A. Kahng and M. Sarrafzadeh, "On the Minimum Density Interconnection Tree Problem," *VLSI Journal*, Vol. 2, No. 2, February 1994, pp. 157-169.
56. J. D. Cho, S. Raje, K. F. Liao and M. Sarrafzadeh, "M 2R A New Multilayer Routing System for High-performance MCMs," *IEEE Transactions on Circuits and Systems*, Vol. 41, No. 4, April 1994, pp. 253-255.
57. M. Sarrafzadeh, F. Wagner, D. Wagner and K. Weihe, "Wiring Knockknee Layouts: A Global Approach," *IEEE Transactions on Computers*, Vol. 43, No. 5, May 1994, pp. 581-589.
58. A. Farrahi and M. Sarrafzadeh, "Complexity of the Lookup-Table Minimization Problem for FPGA Technology Mapping," *IEEE Transactions on Computer-Aided Design*, Vol. 13, No. 11, November 1994, pp. 1319-1332.
59. C. Chiang, C. K. Wong, and M. Sarrafzadeh, "A Weighted Steiner Trees-Based Global Router with Simultaneous Length and Density Minimization," *IEEE Transactions on Computer-Aided Design*, Vol. 13, No. 12, December 1994, pp. 1461-1469.
60. K. H. Yeap and M. Sarrafzadeh, "Sliceable Floorplanning by Graph Dualization," *SIAM Journal on Discrete Mathematics*, Vol. 8, No. 2, 1995, pp. 258-280.

61. M. Marek-Sadowska and M. Sarrafzadeh, "The Crossing Distribution Problem," IEEE Transactions on Computer-Aided Design, Vol. 14, No. 4, pp. 423-433.
62. J. D. Cho and M. Sarrafzadeh, "A Buffer Redistribution Algorithm for High-Performance Clock Net Optimization," IEEE Transactions on VLSI, Vol. 3, No. 1, March 1995, pp. 84-98.
63. S. Maddila and M. Sarrafzadeh, "The Discrete Warehouse Problem," Theoretical Computer Science, April 1995, pp. 231-247.
64. S. Raje and M. Sarrafzadeh, "Scheduling with Multiple Voltages," INTEGRATION: The VLSI Journal, Vol. 23, 1997, pp. 37-59.
65. M. Sarrafzadeh, D. Knol and G. Tellez, "A Delay Budgeting Algorithm Ensuring Maximum Flexibility in Placement," IEEE Transaction on CAD, Vol. 16, No. 11, November 1997, pp. 1332-1341.
66. W.L. Lin, C. K. Wong and M. Sarrafzadeh, "Floating Steiner Trees," IEEE Transactions on Computers, Vol. 47, No. 2, February 1998, pp. 197-211.
67. G. Tellez and M. Sarrafzadeh, "On Distance Preserving Rectilinear Steiner Trees," VLSI Design, Vol. 7, No. 1, April 1998.
68. A. Farrahi, G. Tellez and M. Sarrafzadeh, "Exploiting Sleep Mode for Memory Partitions and Other Applications," VLSI Design, Vol. 7, No. 3, pp. 271-287.
69. G. Tellez and M. Sarrafzadeh, "Minimal Buffer Insertion in Clock Trees with Skew and Slew Rate Constraints," to appear in IEEE Transactions on Computer-Aided Design.
70. D.S. Chen, G. Yeap and M. Sarrafzadeh, "State Encoding of Finite State Machines for Low Power Design," to appear in VLSI Design.
71. W.L. Lin and M. Sarrafzadeh, "On the Power of Re-Synthesis," To appear in SIAM Journal on Computing.
72. S. Nicoloso and M. Sarrafzadeh, "Sum Coloring Problem on Interval Graphs," to appear in Algorithmica.
73. A. Farrahi, D.T. Lee and M. Sarrafzadeh, "Two-Way and Multi-Way Partitioning of a Set of Intervals for Clique-Width Maximization," to appear in Algorithmica.
74. J.D. Cho and M. Sarrafzadeh, "Mixed LP and Mincost Flow-based Four-bend Global Routing in Two Dimensional Arrays," IEEE Transactions on CAD, September 1998, pp. 793-802.
75. J.D. Cho, and S. Raje and M. Sarrafzadeh, "Fast Approximation Algorithms on Maxcut, k-coloring and k-color Ordering for VLSI Applications," IEEE Transactions on Computers, Vol. 47, No. 11, November 1998, pp. 1253-1266.

76. J.D. Cho and M. Sarrafzadeh, Invited chapter in, Wiley Encyclopedia of Electrical and Electronics Engineering, (in the area of VLSI Circuit Layout), 1999.
77. K. Bazargan, S. Kim, and M. Sarrafzadeh, "Nostradamus: Floorplanner of Uncertain Designs," IEEE Transactions on CAD, April 1999.
78. M. Enos, Scott Hauck and M. Sarrafzadeh, "Evaluation and Optimization of Replication Algorithms for Logic Replication," IEEE Transactions on CAD, Vol. 18, No. 9, September 1999, pp. 1237-1248.
79. M. Wang, P. Banerjee and M. Sarrafzadeh, "Placement with Incomplete Data," to appear in VLSI Design, Year 2000 special issue on Physical Design.
80. K. Bazargan and M. Sarrafzadeh, "Fast Template Based Placement for Reconfigurable Computing Systems," special issue on Reconfigurable Computing of IEEE Design & Test, Jan-March 2000, pp. 68-83.
81. K. Bazargan, R. Kastner and M. Sarrafzadeh, "3-D Floorplanning: Simulated Annealing and Greedy Placement Methods for Reconfigurable Computing System," RSP'99 special issue of Journal of Design Automation for Embedded Systems (DAfES), April 2000.
82. A. Ranjan, K. Bazargan and M. Sarrafzadeh, "Fast Hierarchical Floorplanning with Congestion and Timing Control," IEEE International Conference on Computer Design (ICCD) September 2000, pp. 357-362.
83. M. Wang and M. Sarrafzadeh, "Congestion Minimization during Placement," IEEE Transactions on Computer-Aided Design (TCAD) Vol. 19, No. 10, October 2000, pp. 1140-1148.
84. K. Bazargan and M. Sarrafzadeh, "Fast Scheduling and Placement Methods for C to Hardware/Software Compilation," SPIE International Symposium on Information Technologies, Vol. 4212, November 2000.
85. M. Breuer, F. Somenzi and M. Sarrafzadeh, "Fundamental CAD Algorithms," IEEE Transactions on CAD (special issue on Electronic Design Automation at the Turn of the Century) Vol. 19, No. 12, December 2000, pp. 1449-1475.
86. M. F. Gorman and M. Sarrafzadeh, "An Application of Dynamic Programming to Crew Balancing at BNSF Railway," International Journal of Services Technology and Management, Vol. 1, No. 2/3, 2000, pp. 174-187.
87. A. Nayak, M. Haldar, P. Banerjee, C. Chen and Majid Sarrafzadeh, "Power Optimization of Delay Constrained Circuits," VLSI Design (Low-power System Design).
88. K. Bazargan, S. Ogrenci and M. Sarrafzadeh, "Integrating Scheduling and Physical Design into a Coherent Compilation Cycle for Reconfigurable Computing Architectures," Design Automation Conference (DAC), 2001, pp. 635-640.

89. A. Ranjan, K. Bazargan, S. Ogrenci and M. Sarrafzadeh, "Fast Floorplanning for Effective Prediction and Construction," IEEE Transactions on Very Large Scale Integration (VLSI) Systems, Vol. 9, No. 2, April 2001, pp. 341-351.
90. Farrahi, C. Chen, A. Srivatsava, G. Tellez and M. Sarrafzadeh, "Activity Driven Clock Design for Low Power Circuits," IEEE Transactions on CAD (TCAD), Vol. 20, No. 6, June 2001, pp. 705-714.
91. A. Srivastava, R. Kastner and M. Sarrafzadeh, "On the Complexity of Gate Duplication," IEEE Transactions on CAD (TCAD), September 2001.
92. C. Chen, A. Srivatsava and M. Sarrafzadeh, "On Gate-Level Power Optimization Using Dual Supply Voltages," IEEE Transactions on VLSI, Vol. 9, No. 5, Oct 2001, pp. 616-629.
93. A. Srivastava, C. Chen and M. Sarrafzadeh, "Timing Driven Gate Duplication in the Technology Independent Stage," IEICE Transactions on Fundamentals of Electronics, Communications and Computer Sciences, Vol. E84-A, Nov. 2001, pp. 2673-2680.
94. X. Yang, E. Bozorgzadeh, M. Sarrafzadem and M. Wang, "Modern Standard-cell Placement Techniques," in Optimization in VLSI Design: Floorplanning, Timing, and Layout (D.Z. Du and B. Lu, editors), January 2002.
95. X. Yang, R. Kastner and M. Sarrafzadeh, "Congestion Estimation During Top-down Placement," IEEE Transactions on CAD (TCAD), Vol. 21, No. 1, January 2002, pp. 72-80.
96. C. Chen, X. Yang and M. Sarrafzadeh, "Predicting Potential Performance for Digital Circuits," IEEE Transactions on CAD, Vol. 21, No. 3, March 2002, pp. 253-262.
97. M. Sarrafzadeh, E. Bozorgzadeh, R. Kastner and S. Ogrenci, "SPS: A Strategically Programmable System," A chapter in the Computer Engineering Handbook, CRC Press, 2002.
98. C. Chen and M. Sarrafzadeh, "Simultaneous Voltage Scaling and Gate Sizing for Low Power Design," IEEE Transactions on Circuits and Systems (Part II), Vol. 49, No. 6, June 2002, pp. 400-408.
99. R. Kastner, E. Bozorgzadeh and M. Sarrafzadeh, "Pattern Routing: Use and Theory for Increasing Predictability and Avoiding Coupling," IEEE Transactions on CAD, Vol. 21, No. 7, July 2002, pp. 777-790.
100. S. Ghiasi, A. Srivastava, X. Yang and M. Sarrafzadeh, "Optimal Energy Aware Clustering in Sensor Networks," SENSORS Journal, Vol. 2, Issue 7, July 2002, pp. 258-269.
101. C. Chen, E. Bozorgzadeh, A. Srivatsava and M. Sarrafzadeh, "Budget Management and Its Applications," Algorithmica, Vol. 34, No. 3, July 2002, pp. 261-275.
102. R. Kastner, A. Kaplan, S. Ogrenci Memik and E. Bozorgzadeh, "Instruction Generation

- for Hybrid Reconfigurable Systems,” ACM Transactions on Design Automation of Embedded Systems (TODAES) Vol. 7, No. 4, October 2002.
103. A. Srivastava, E. Kursun, and M. Sarrafzadeh, “Predictability in RT-Level Designs,” special issue on Low Power IC Designs in the Journal of Circuits, Systems and Computers.
 104. E. Bozorgzadeh, A. Kaplan, R. Kastner, and S. Ogrenci and M. Sarrafzadeh, “Multi-Level Optimization in Reconfigurable Computing Systems,” Multilevel Optimization and VLSI CAD, Kluwer Academic Publishers, Boston, 2002.
 105. A. Srivastava E. Kursun and M. Sarrafzadeh, “Predictability in RT-Level Designs,” Proceedings of the Journal of Circuits, Systems and Computers, Special Issue on Low Power IC Design, (JCSC) August 2002, Vol. 11, No. 4, pp. 323-332.
 106. S. Ghiasihafezi, A. Srivastava, X. Yang and M. Sarrafzadeh, “Optimal Energy Aware Clustering in Sensor Networks,” SENSORS Journal, July 2002, Vol.2, Issue 7, pp. 258-269.
 107. S. E. Kursun and M. Sarrafzadeh, “Predictability in RTL-Designs,” To Appear in Journal of Circuits, Systems and Computers (JCSC) Special Issue on Low Power IC Designs.
 108. A. Srivastava, J. Sobaje, M. Potkonjak and M. Sarrafzadeh, “Optimal Node Scheduling for Effective Energy Usage in Sensor Networks,” A chapter in System-Level Power Optimization for Wireless Multimedia Communication, Kluwer Academic Publishers, 2002.
 109. X. Yang, B.K. Choi and M. Sarrafzadeh, “Wirelength Estimation based on Rent Exponents of Partitioning and Placement,” to appear in IEEE Transactions on CAD.
 110. S. Ogrenci, A. Katsaggelos and M. Sarrafzadeh, “FPGA Analysis and Implementation of an Iterative Image Restoration,” IEEE Transactions on Computers, Vol. 52, No. 3, March 2003, pp. 390-399.
 111. X. Yang, B.K. Choi and M. Sarrafzadeh, “Routability-Driven Whitespace Allocation for Fixed-Die Standard-Cell Placement,” IEEE Transactions on Computer-Aided Design (TCAD) Vol. 22, April 2003.
 112. E. Bozorgzadeh, R. Kastner and M. Sarrafzadeh, “Creating and Exploiting Flexibility in Rectilinear Steiner Trees,” IEEE Transactions on Computer Aided Design of Integrated Circuits and Systems (TCAD) Vol. 22, No. 5, May 2003.
 113. X. Yang, M. Wang, R. Kastner, S. Ghiasi and M. Sarrafzadeh, “Congestion Reduction During Placement with Provably Good Approximation Bound,” ACM Transactions on Design Automation of Electronic Systems (TODAES) Vol. 8, No. 3, July 2003, pp. 316-333.
 114. S. Ghiasi, A. Nahapetian and M. Sarrafzadeh, “An Optimal Algorithm for Minimizing Runtime Reconfiguration Delay,” To Appear in ACM Transactions on Embedded

115. A. Srivastava, C. Chen and M. Sarrafzadeh, "Timing Driven Gate Duplication in Technology Independent Phase," in Special Section on VLSI Design and CAD Algorithms of the IEEE Transactions, January 2004.
116. E. Bozorgzadeh, S. Ogrenci Memik, X. Yang and M. Sarrafzadeh, "Routability-Driven Packing: Metrics and Algorithms for Cluster-based FPGAs," Journal of Circuits, Systems and Computers (JCSC) Vol. 13, No. 1, February 2004, pp. 77-100.
117. S. Ghiasi, A. Nahapetian and M. Sarrafzadeh, "An Optimal Algorithm for Minimizing Runtime Reconfiguration Delay," ACM Transactions on Embedded Computing Systems (TECS) Vol. 3, No 2, pp. 237-256, May 2004.
118. E. Bozorgzadeh, S. Ghiasi, A. Takahashi and M. Sarrafzadeh, "Optimal Integer Delay Budget Assignment on Directed Acyclic Graphs," IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems (TCAD) Vol. 23, No 8, August 2004, pp. 1184-1199.
119. S. Ghiasi, H. J. Moon, A. Nahapetian and M. Sarrafzadeh, "Collaborative and Reconfigurable Object Tracking," Kluwer Journal of Supercomputing, Vol. 30, No 3, December 2004, pp. 213-238.
120. S. Ghiasi, K. Nguyen, E. Bozorgzadeh and M. Sarrafzadeh, "Efficient Timing Budget Management for Accuracy Improvement in a Collaborative Object Tracking System," to appear in the Journal on Applied Signal Processing (EURASIP) Volume 42, Issue 1, Jan 2006, Pages 43 - 55.
121. S. Ghiasi, A. Nahapetian, H. J. Moon and M. Sarrafzadeh, "Reconfiguration in Network of Embedded Systems: Challenges and Adaptive Tracking Case Study," Journal of Embedded Computing (JEC), Vol. 1, No 1, 2005, pp. 147-166.
122. S. Memik, E. Bozorgzadeh, R. Kastner and M. Sarrafzadeh, "A Scheduling Algorithm for Optimization and Planning in High-level Synthesis," ACM Transactions on Design Automation of Electronic Systems (TODAES), Vol. 10, No. 1, January 2005.
123. S. Memik, A. Srivastava, B. K. Choi and M. Sarrafzadeh, "On Effective Slack Management in Post-Scheduling Phase," IEEE Transactions on Computer Aided-Design of Integrated Circuits and Systems, Vol. 24, No. 4, April 2005.
124. A. Srivastava, R. Kastner, C. Chen and M. Sarrafzadeh, "Timing Driven Gate Duplication," Proceedings of the IEEE Transactions on Very Large Scale Integration Systems (TVLSI) January 2004, pp. 42-51.
125. Soheil Ghiasi, Elaheh Bozorgzadeh, Po-kuan Huang, Majid Sarrafzadeh, "A Unified Theory of Timing Budget Management", to appear in IEEE Transactions on Computer-Aided Design (TCAD).
126. Roozbeh Jafari, Foad Dabiri, Philip Brisk, Majid Sarrafzadeh, "Reconfigurable Fabric Vest for Fatal Heart Disease Prevention" to appear in Journal of Embedded Computing

(JEC).

127. Philip Brisk, Foad Dabiri, Roozbeh Jafari, and Majid Sarrafzadeh "Optimal Register Sharing for High-Level Synthesis of SSA-Form Programs" IEEE Transactions on CAD (TCAD), vol 25 no. 5, pp 772-779, May 2006.
128. Adaptive Electrocardiogram Feature Extraction on Distributed Embedded Systems, Roozbeh Jafari, Hyduke Noshadi, Soheil Ghiasi, Majid Sarrafzadeh, IEEE Transactions on Parallel and Distributed Systems special issue on High Performance Computational Biology (TPDS), vol. 17, no. 8, pp 1-11, August 2006.
129. Roozbeh Jafari, Foad Dabiri, Ani Nahapetian, Majid Sarrafzadeh, "An Efficient Placement and Routing Technique for Fault-tolerant Distributed Embedded Computing," to appear in ACM Transactions on Embedded Computing Systems (TECS).
130. Foad Dabiri, Roozbeh Jafari, Ani Nahapetian, Majid Sarrafzadeh, "Lightweight Embedded Systems," Computer Engineering Handbook, Edited by Vojin Oklobdzija, Taylor and Francis/CRS Press.
131. Tia Gao, Tammara Massey, Leo Selavo, David Crawford, Bor-rong Chen, Konrad Lorincz, Victor Shnayder, Logan Hauenstein, Foad Dabiri, James Jeng, Arjun Channugam, David White, Majid Sarrafzadeh, and Matt Welsh. "The Advanced Health and Disaster Aid Network: A Light-weight Wireless Medical System for Triage." IEEE Transactions on Biomedical Circuits and Systems (IEEE TBCAS), Vol. 1, No. 3, pp. 203-216, 2007.
132. Foad Dabiri, Ani Nahapetian, Miodrag Potkonjak, Majid Sarrafzadeh, "Soft Error-Aware Power Optimization using Gate Sizing". ",IEEE Transaction on Computer Aided Design (TCAD), to Vol 27, No. 10, October 2008, pp. 1788 – 1797.
133. Foad Dabiri, Tammara Massey, Hyduke Noshadi, C.K. Lin, Robert Tan, Jacob Schmidt, and Majid Sarrafzadeh, "A Telehealth Architecture for Networked Embedded Systems: A Case Study in In-vivo Health Monitoring", IEEE Transactions on Information Technology in Biomedicine.
134. Robert Tan, Timothy McClure, C. K. Lin, David Jea, Foad Dabiri, Tammara Massey, Majid Sarrafzadeh, Mani Srivastava, C. D. Montemagno, Peter Schulam and Jacob Schmidt, "Development of a fully implantable wireless pressure monitoring system", Biomedical Microdevices, Springer, October 2008.
135. Yu Hu, Adam Stoelting, Yi-Tao Wang, Yi Zou and Majid Sarrafzadeh," Smart Cushion: A Case Study on Wireless Healthcare Application Development", IEEE Potential, January 2010.
136. Suh, M., Chen, C., Woodbridge, J., Tu, M., Kim, J., Nahapetian, A., Evangelista, L., Sarrafzadeh, M., "A Remote Patient Monitoring System for Congestive Heart Failure", Journal of Medical Systems(JOMS) 2011.
137. Suh, M., Sarrafzadeh, M., Nahapetian, A., Woodbridge, J., Rofouei, M., "Machine

138. Nosahdi, H., Dabiri, F., Amini, N., Ahmadian, S., Sarrafzadeh, M., "HERMES: Mobile System for Instability Analysis and Balance Assessment", ACM Transactions on Embedded Computing Systems (TECS), (2011)
139. Amini, N., Gerlan, M., xu, W., Vahdatpour, A., Sarrafzadeh, M., "Cluster Size Optimization in Sensor Networks with Decentralized Cluster-Based Protocols", Computer Communications, (2011)
140. Noshadi, H., Sarrafzadeh, M., "Transaction on Sensor Networks", Association For Computing Machinery (ACM), (2011)
141. Dabiri, F., Noshadi, H., Sarrafzadeh, M., "Behavioral Reconfigurable and Adaptive Data Reduction in Body Sensor Networks", International Journal of Autonomous and Adaptive Communications Systems (IJAACS), Vol 6, No.3, 2013.
142. Gad, P., Woodbridge, J., Lavrov, I., Zhong, H., Roy, R., Sarrafzadeh, M., Edgerton, R., "Forelimb EMG-based trigger to control an electronic spinal bridge to enable hindlimb stepping after a complete spinal cord lesion in rats", Journal of NeuroEngineering and Rehabilitation 2012, 9(38) (06/12/2012)
143. Xu, W., Zhang, M., Sawchuk, A., Sarrafzadeh, M., "Robust Human Activity Monitoring via Compressed Sensing", IEEE Transactions on Biomedical Engineering (TBME), (2012)
144. Yen, I., Leung, C., Lan, M., Sarrafzadeh, M., Kayekjian, K., Duru, K., "A pilot study using global positioning systems (GPS) devices and surveys to ascertain older adults' travel patterns", Journal of Applied Gerontology, (2013)
145. Noshadi, H., Dabiri, F., Ahmadian, S., Amini, N., Sarrafzadeh, M., "HERMES: Mobile System for Instability Analysis and BalanceAssessment", ACM Transactions on Embedded Computing Systems, Vol 12, No. 1s, Article 57, (March 2013)
146. Noshadi, H., Dabiri, F., Meguerdichian, S., Potkonjak, M., Sarrafzadeh, M., "Behavior-Oriented Data Resource Management in Medical Sensing Systems", ACM Transactions on Sensor Networks, Vol 9, No. 2, Article 12, (February 2013)
147. Xu, W., Huang, M., Amini, N., Sarrafzadeh, M., "eCushion: A Textile Pressure Sensor Array Design and Calibration for Sitting Posture Analysis", IEEE Sensors Journal (2013)
148. Lee, S., Ghasemzadeh, H., Mortazavi, B., Sarrafzadeh, M., "Pervasive Assessment of Motor Function: A Lightweight Grip Strength Tracking System", IEEE Journal of Biomedical and Health Informatics, 17(6):1023 - 1030 (2013)
149. Lan, M., Ghasemzadeh, H., Sarrafzadeh, M., "SmartFall: An Automatic Fall Detection and Cause Identification System", IEEE Sensors Journal, (2013)

150. Samy, L., Huang, M., Liu, J., Xu, W., Sarrafzadeh, M., "Unobtrusive Sleep Stage Identification Using a Pressure-Sensitive Bed Sheet", IEEE Sensors Journal, (2013)
151. Liu, J., Xu, W., Huang, M., Alshurafa, N., Sarrafzadeh, M., Raut, N., Yadegar, B., "Sleep Posture Analysis using a Dense Pressure Sensitive Bedsheet", Pervasive and Mobile Computing, (2013)
152. Alshurafa, N., Xu, W., Liu, J., Huang, M., Mortazavi, B., Roberts, C., Sarrafzadeh, M., "Designing a Robust Activity Recognition Framework for Health and Exergaming using Wearable Sensors", IEEE Journal of Biomedical and Health Informatics, (2013)
153. Huang, A., Xu, W., Li, Z., Xie, L., Sarrafzadeh, M., Li, X., Cong, J., "System Light-loading Technology for mHealth: Manifold-Learning based Medical Data Cleansing and Clinical Trials in WE-CARE Project", IEEE Journal of Biomedical and Health Informatics, (November 2013)
154. Mortazavi, B., Nyamathi, S., Lee, S., Wilkerson, T., Ghasemzadeh, H., Sarrafzadeh, M., "Near-Realistic Mobile Exergames with Wireless Wearable Sensors", Journal of Biomedical and Health Informatics, (2013)
155. Huang, M., Liu, J., Xu, W., Alshurafa, N., Zhang, X., Sarrafzadeh, M., "Using Pressure Map Sequences for Recognition of On Bed Rehabilitation Exercises", IEEE Journal of Biomedical and Health Informatics, (2014)
156. Getachew, R., Lee, S., Yew, A., Kimball, J., Lu, D., Garst, J., Ghalehsari, N., Park, B., Razaghy, M., Espinal, M., Ostowari, A., Ghavamrezaii, A., Pourtaheri, S., Sarrafzadeh, M., Lu, D., Li, C., "Utilization of a novel digital measurement tool for quantitative assessment of upper extremity motor dexterity: a controlled pilot study", Journal of Neuroengineering and Rehabilitation, 11(121) (2014)
157. Alshurafa, N., Eastwood, J., Nyamathi, S., Liu, J., Xu, W., Ghasemzadeh, H., Pourhomayoun, M., Sarrafzadeh, M., "Improving Compliance in a Remote Health Monitoring System through Smartphone Battery Optimization", IEEE Journal of Biomedical and Health Informatics (J-BHI), (2014)
158. Liu, J., Huang, M., Xu, W., Zhang, X., Stevens, L., Alshurafa, N., Sarrafzadeh, M., "BreathSens: A Continuous On-Bed Respiratory Monitoring System with Torso Localization using an Unobtrusive Pressure Sensing Array", IEEE Journal of Biomedical and Health Informatics (J-BHI), (2014)
159. Mortazavi, B., Pourhomayoun, M., Ghasemzadeh, H., Jafari, R., Roberts, C., Sarrafzadeh, M., "Context-Aware Data Processing to Enhance Quality of Measurements in Wireless Health Systems: An Application to MET Calculation of Exergaming Actions", IEEE Internet of Things Journal, (2014)
160. Huang, A., Xu, W., Zhinan, L., Xie, L., Sarrafzadeh, M., Li, X., Cong, J., "System Light-Loading Technology for mHealth: Manifold-Learning-Based Medical Data Cleansing and Clinical Trials in WE-CARE Project", IEEE Journal of Biomedical and Health Informatics, 18(Number 5):1581 - 1589 (September 2014)

161. Lee, S., Mortazavi, B., Hoffman, H., Lu, D., Li, C., Paak, B., Garst, J., Razaghy, M., Espinal, M., Park, E., Lu, D., Sarrafzadeh, M., "A Prediction Model for Functional Outcomes in Spinal Cord Disorder Patients using Gaussian Process Regression", IEEE Journal of Biomedical and Health Informatics, (2014)
162. Kalantarian, H., Alshurafa, N., Le, T., Sarrafzadeh, M., "Monitoring Eating Habits using a Piezoelectric Sensor-Based Necklace", Elsevier Computers in Biology and Medicine, (2015)
163. Alshurafa, N., Kalantarian, H., Pourhomayoun, M., Liu, J., Shahbazi, B., Sarrafzadeh, M., "Recognition of Nutrition-Intake using Time-Frequency Decomposition in a Wearable Necklace using a Piezoelectric Sensor", IEEE Sensors Journal, (2015)
164. Huang, M., Liu, J., Xu, W., Gu, C., Li, C., Sarrafzadeh, M., "A Self-Calibrating Radar Sensor System for Measuring Vital Signs", IEEE Transactions on Biomedical Circuits and Systems, 2015, (2015)
165. Kalantarian, H., Sarrafzadeh, M., "Audio-Based Detection and Evaluation of Eating Behavior using the Smartwatch Platform", Elsevier Computers in Biology and Medicine journal, (2015)
166. Woodbridge, J., Mortazavi, B., Bui, A., Sarrafzadeh, M., "Improving Biomedical Signal Search Results in Big Data Case-Based Reasoning Environments", Pervasive and Mobile Computing, (2015)
167. Mortazavi, B., Nemati, E. VanderWall, K., Flores-Rodriguez, H., Jacinta Cai, J., Lucier, J., Naeim, A., Sarrafzadeh, M., "Can Smartwatches Replace Smartphones for Posture Tracking?", Sensors (ISSN 1424-8220), (Oct 2015)
168. Evangelista, L., Moser, D., Lee, J., Moore, A., Ghasemzadeh, H., Sarrafzadeh, M., Mangione, C., "Examining Older Adults' Perceptions of Usability and Acceptability of Remote Monitoring Systems to Manage Chronic Heart Failure", Sage Journals- Gerontology and Geriatric Medicine, (2015)
169. Kalantarian, H., Alshurafa, N., Sarrafzadeh, M., "Detection of Gestures Associated with Medication Adherence using Smartwatch-based Inertial Sensors", IEEE Sensors Journal, Sensors-13275-2015.R1 (2015)
170. Ong, M., Romano, P., Edgington, S., Aronow, H., Auerbach, A., Black, J., De Marco, T., Escarce, J., Evangelista, L., Ganiats, T., Greenberg, B., Greenfield, S., Kaplan, S., Kimchi, A., Liu, H., Lombardo, D., Mangione, C., Sarrafzadeh, M., Tong, K., Fonarow, G., the BEAT-HF Research Group., "Remote patient monitoring after discharge of hospitalized heart failure patients: the Better Effectiveness After Transition - Heart Failure (BEAT-HF) randomized controlled trial", JAMA: Internal Medicine, (November 2015)
171. Mortazavi, B., Pourhomayoun, M., Lee, S., Nyamathi, S., Wu, B., Sarrafzadeh, M., "User-Optimized Activity Recognition for Exergaming" has been accepted for publication in Pervasive and Mobile Computing", Pervasive and Mobile Computing Elsevier, (December 2015)

172. Evangelista, L., Moser, D., Lee, J., Moore, A., Ghasemzadeh, H., Sarrafzadeh, M., Mangione, C., "Examining Older Adults' Perceptions of Usability and Acceptability of Remote Monitoring Systems to Manage Chronic Heart Failure", *SAGE Gerontology & Geriatric Medicine*, (October 2015)
173. Alshurafa, N., Sideris, C., Pourhomayoun, M., Kalantarian, H., Sarrafzadeh, M., Eastwood, J., "Remote Health Monitoring Outcome Success Prediction using Baseline and First Month Intervention Data", *Journal of Biomedical and Health Informatics (JBHI)*, (2016)
174. Kalantarian, H., Alshurafa, N., Sideris, C., Le, T., Mortazavi, B., Sarrafzadeh, M., "A Comparison of Piezoelectric and Acoustic Techniques for Assessment of Eating Habits", *Elsevier Journal of Obesity Medicine*, (2016)
175. Kalantarian, H., Sideris, K., Sarrafzadeh, M., "A Hierarchical Segmentation and Classification Scheme for Processing Sensor Data", *IEEE Journal of Biomedical and Health Informatics (J-BHI)*, (2016)
176. Lee, S., Park, E., Huang, A., Mortazavi, B., Garst, J., Jahanforouz, N., Espinal, M., Sierro, T., Pollack, S., Afridi, M., Daneshvar, M., Ghias, S., Lu, D., Sarrafzadeh, M., "Objectively Quantifying Walking Ability in Degenerative Spinal Disorder Patients using Sensor Equipped Smart Shoes", *Medical Engineering & Physics*, (2016)
177. Kalantarian, H., Motamed, B., Alshurafa, N., Sarrafzadeh, M., "A wearable sensor system for medication adherence prediction", *Artificial Intelligence in Medicine (AIIM)*, (2016)
178. Kalantarian, H., Alshurafa, N., Sarrafzadeh, M., "A Survey of Electronic Methods for Non-Invasive Detection of Eating Behavior", *IEEE Pervasive Computing*, PC-2015-07-0058.R1, (2016)
179. **(Honor paper: a designation given by the journal based on reviews)** Sideris, C., Pourhomayoun, M., Kalantarian, H., Sarrafzadeh, M., "A Flexible Data-Driven Comorbidity Feature Extraction Framework", *Computers in Biology and Medicine*, CBM-D-15-01141R1, (2016)
180. Kalantarian, H., Mortazavi, B., Pourhomayoun, M., Alshurafa, N., Sarrafzadeh, M., "Probabilistic Segmentation of Time-Series Audio Signals using Support Vector Machines", *Microprocessors and Microsystems*, Ref. No.: MICPRO-D-15-00377R1, (2016)
181. Kalantarian, H., Sideris, C., Mortazavi, B., Alshurafa, N., Sarrafzadeh, M., "Dynamic Computation Offloading for Low-Power Wearable Health Monitoring Systems", *IEEE Transactions on Biomedical Engineering (TBME)*, TBME-00140-2016.R1, (2016)
182. Kalantarian, H., Sarrafzadeh, M., "Pedometers Without Batteries: An Energy Harvesting Shoe", *IEEE Sensors Journal*. December 2016. Volume 16, Issue 23.
183. Lu, D., Edgerton, R., Modaber, M., AuYong, N., Morikawa, E., Zdunowski, S., Sarino,

- M., Sarrafzadeh, M., Nuwer, M., Roy, R., Gerasimenko, Y., "Engaging Cervical Spinal Cord Networks to Reenable Volitional Control of Hand Function in Tetraplegic Patients", Sage Journals, Neurorehabilitation and Neural Repair, DOI: 10.1177/1545968316644344, (July 2016)
184. Park, E., Lee, S., Nam, H.S., Garst, J., Huang, A., Campion, A., Arnell, M., Ghalehsariand, N., Park, S., Chang, H., Lu, D., Sarrafzadeh, M., "Unobtrusive and Continuous Monitoring of Alcohol Impaired Gait Using Smart Shoes", *Methods of Information in Medicine*, Vol. 56, No.1, p74--82, Jan 2017.
 185. Lee, S., Huang, A., Mortazavi, B., Li, C., Hoffman, H., Garst, J., Lu, D., Getachew, R., Espinal, M., Razaghy, M., Ghalehsari, N., Paak, B., Ghavam, A., Afridi, M., Ostowari, A., Ghasemzadeh, H., Lu, D., Sarrafzadeh, M., "Quantitative assessment of hand motor function in cervical spinal disorder patients using target tracking tests", *Journal of Rehabilitation Research & Development (JRRD)*, 53(6) (November 2016)
 186. Evangelista, L., Ghasemzadeh, H., Lee, J., Fallahzadeh, R., Sarrafzadeh, M., Moser, D., "Predicting Adherence to Use of Remote Health Monitoring Systems in a Cohort of Patients with Chronic Heart Failure", *Technology and Health Care*, 16-466-R, (2016)
 187. Kalantarian, H., Alshurafa, N., Sarrafzadeh, M., "A Survey of Diet Monitoring Technology", *IEEE Pervasive Computing*, IEEE Pervasive Computing. January 2017. Volume 16, Issue 1.
 188. Kalantarian, H., Sarrafzadeh, M., "Probabilistic Time-Series Segmentation", *Pervasive and Mobile Computing*, (March 2017) Equal
 189. Kalantarian, H., Sideris, C., Sarrafzadeh, M., "A Hierarchical Classification and Segmentation Scheme for Processing Sensor Data", *IEEE Journal of Biomedical and Health Informatics*, 10.1109/JBHI.2016.2526679, 21(3):672 - 681 (May 2017).
 190. A. Hosseini, C.M. Buonocore, S. Hashemzadeh, H. Hojaiji, H. Kalantraian, C. Sideris, A.A.T. Bui, C.E. King, M. Sarrafzadeh. Feasibility of a Secure Wireless Sensing Smartwatch Application for the Self-Management of Pediatric Asthma. *Sensors*, 2017 .
 191. Chrstine King and Majid Sarrafzadeh, "A SURVEY OF SMARTWATCHES IN REMOTE HEALTH MONITORING", *Journal of Healthcare Informatics Research*.

IV. Conference Papers

192. F. P. Preparata and M. Sarrafzadeh, "Channel Routing of Nets of Bounded Degree," *Proceeding of the VLSI: Algorithms and Architectures* (P. Bertolazzi and F. Luccio ed.), North-Holland, 1984, pp. 189-203. **(Invited Paper)**
193. G. Bilardi and M. Sarrafzadeh, "Optimal Discrete Fourier Transform in VLSI," *Proceeding of the VLSI: Algorithms and Architectures* (P. Bertolazzi and F. Luccio ed.), North-Holland, 1984, pp. 79-89.

194. M. Sarrafzadeh, "On the Complexity of the General Channel Routing Problem in the Knock-Knee Mode," Proceedings of the 20th Annual Conference on Information Sciences and Systems, Princeton, NJ, March 1986, pp. 161-164.
195. M. Sarrafzadeh, "Layout Stretching to Ensure Wirability," Proceeding of the 21st Annual Conference on Information Sciences and Systems, (with M. L. Brady), Johns Hopkins, March 25-28, 1987, pp. 588-593.
196. Y. M. Huang and M. Sarrafzadeh, "A Parallel Algorithm for Minimum Dual-Cover with Application to CMOS Layout," Proceedings of the 1988 International Conference on Parallel Processing.
197. M. Sarrafzadeh, "Multilayer Routing in Sea-of-Gates," Proceeding of the IFIP Workshop on Physical Design of Sea of Gates in VLSI, W. Germany, August 1988.
198. R. D. Lou and M. Sarrafzadeh, "General Circular Permutation Layout," Proceedings of the 1988 Allerton Conference, October 1988, pp. 1136-1137.
199. R.D. Lou, K. F. Liao and M. Sarrafzadeh, "Planar Routing Around a Rectangle," Proceeding of the 1988 International Computer Symposium, Taipei, Taiwan.
200. A. Katsaggelos, S. Kumar and M. Sarrafzadeh, "Parallel Processing Architectures for Iterative Image Restoration," Proceedings of the 1989 IEEE International Conference on ASSP, Glasgow, Scotland, pp. 2544-2547.
201. C. Chiang and M. Sarrafzadeh, "Using 45-degree Wires to Ensure Wirability," Proceeding of the 20th International Conference on Combinatorics, Graph Theory and Computing, Boca Raton, Florida, February 1989.
202. M. Sarrafzadeh and D. Zhou, "Theoretical Aspects of Global Routing," Proceeding of the 20th International Conference on Combinatorics, Graph Theory and Computing, Boca Raton, Florida.
203. G. Bilardi, S. Hornick and M. Sarrafzadeh, "Optimal VLSI Architecture for Multidimensional DFT," Proceedings of the 1989 ACM Symposium on Parallel Algorithms and Architectures, NM, June 18-21, 1989, pp. 265-272.
204. C. Chiang, M. Sarrafzadeh and C. K. Wong, "A Powerful Global Router: Based on Steiner Min-Max Trees," Proceedings of the International Symposium on Computer-Aided-Design (ICCAD-89), Santa Clara, CA, November 1989, pp. 2-5.
205. R.D. Lou, D.T. Lee and M. Sarrafzadeh, "An Optimal Algorithm for the Maximum Two-chain Problem," Proceedings of the First ACM SIAM Conference on Discrete Algorithms, San Francisco, January 1990, pp. 149-158.
206. R. D. Lou and M. Sarrafzadeh, "Circular Permutation Family of Graphs," Proceedings of the International Workshop on Discrete Algorithms and Complexity, Fukuoka, Japan, November 1989, pp. 107-114.
207. Katsaggelos, S. Kumar and M. Sarrafzadeh, "Parallel Architecture for an Iterative Image

- Restoration Algorithms,” Proceedings of the IEEE International Symposium on Circuits and System (ISCAS) May 1990, pp. 2605-2608. **(Invited Paper)**
208. Y. Sun and M. Sarrafzadeh, “Floorplanning by Graph Dualization: L-shaped Modules,” Proceedings of the IEEE International Symposium on Circuits and System (ISCAS) May 1990, pp. 2845-2848.
 209. R. D. Lou and M. Sarrafzadeh, “Maximum k-Coverings of Weighted Transitive Graphs with Applications,” Proceedings of the IEEE International Symposium on Circuits and System (ISCAS) May 1990, pp. 332-335. **(Invited Paper)**
 210. M. Nag and M. Sarrafzadeh, “A Parallel Algorithm for Two-Layer Wiring,” Proceedings of the 1990 International Conference on Parallel Processing.
 211. K. F. Liao and M. Sarrafzadeh, “Vertex-disjoint Trees in Planar Graphs,” Proceeding of the 16th International Workshop on Graph-Theoretic Concepts in Computer Science (WG-90), with K.F. Liao, Berlin, West Germany, June 1990.
 212. J. M. Ho, A. Suzuki and M. Sarrafzadeh, “An Exact Algorithm for Single Layer Wire-Length Minimization,” Proceedings of the IEEE International Conference on Computer-Aided Design (ICCAD-90), with J.M. Ho and A. Suzuki, Santa Clara, CA, November 1990, pp. 424-427.
 213. R.D. Lou and M. Sarrafzadeh, “An Efficient Algorithm for the Maximum k-chain Problem,” Proceedings of the 1990 Allerton Conference, with R.D. Lou, pp. 315-323.
 214. N. Holmes, N. Sherwani and M. Sarrafzadeh, “New Algorithms for Over-the-Cell Channel Routing Using Vacant Terminals,” Proceedings of the 1991 IEEE Design Automation Conference (DAC'91), with N. Holmes and N. Sherwani, pp. 126-131.
 215. J. D. Cho and M. Sarrafzadeh, “The Pin Redistribution Problem in Multi-Chip Modules,” Proceedings of ASIC'91: Fourth Annual IEEE International ASIC Conference and Exhibit, with J. D. Cho, Rochester, NY, September 23-27, 1991, pp. 9-2-1 to 9-2-4.
 216. K. F. Liao, C. K. Wong and M. Sarrafzadeh, “Single Layer Global Routing,” Proceedings of ASIC'91: Fourth Annual IEEE International ASIC Conference and Exhibit, with K. F. Liao and C. K. Wong, Rochester, NY, September 23-27, 1991, pp. 14-4-1 to 14-4-4.
 217. J. Cong, A. Kahng, G. Robins and M. Sarrafzadeh, “Performance Driven Global Routing for Cell Based IC's,” Proceedings of the IEEE International Conference on Computer Design (ICCD), October 14-16, 1991, pp. 170-173.
 218. N. Holmes, N. Sherwani and M. Sarrafzadeh, “Algorithms for Three-Layer Over-the-Cell Channel Routing,” Proceedings of the IEEE International Conference on Computer-Aided Design (ICCAD-91), with N. Holmes and N. Sherwani, Santa Clara, CA, November 1991, pp. 428-431. **(Distinguished Paper)**
 219. M. Marek-Sadowska and M. Sarrafzadeh, “The Crossing Distribution Problem,”

(Distinguished Paper)

220. M. Sarrafzadeh and D. T. Lee, "Maximum Independent Set of a Permutation Graph in k Tracks," Proceedings of The Second Annual International Symposium on Algorithm, with D. T. Lee, Taipei, Taiwan, December 1991.
221. K.H. Yeap and M. Sarrafzadeh, "A Theorem on Slicability," Proceeding of the Second Great Lakes Computer Science Symposium, with K. H. Yeap, November 1991, Kalamazoo, MI.
222. K.H. Yeap and M. Sarrafzadeh, "Graph Dualization: 2-concave Modules are Necessary and Sufficient," Proceedings of the 1991 Allerton Conference, with K. H. Yeap.
223. J. Cong, A. Kahng, G. Robins, M. Sarrafzadeh and C. K. Wong, "Provably Good Performance Driven Global Routing," with J. Cong, A. Kahng, G. Robins, and C. K. Wong, Proceedings of the IEEE International Symposium on Circuits and System (ISCAS-92), pp. 739-752.
224. B. Wu, N. Sherwani and M. Sarrafzadeh, "On Minimum Bend Single Row Routing," Proceedings of the IEEE International Symposium on Circuits and System (ISCAS-92), with Bo Wu and N. Sherwani, pp. 29-32.
225. C. Chiang, M. Sarrafzadeh and C. K. Wong, "An Optimal Algorithm for Exact Rectilinear Steiner Trees For Switchbox with Obstacles," Proceedings of the IEEE International Symposium on Circuits and System (ISCAS-92), with C. Chiang and C. K. Wong, pp. 9- 12.
226. N. Holmes, N. Sherwani and M. Sarrafzadeh, "Over-the-Cell Channel Routing for High-Performance Circuits," Proceedings of the 1992 IEEE Design Automation Conference (DAC'92), with N. Holmes and N. Sherwani, pp. 600-603.
227. N. Holmes, N. Sherwani and M. Sarrafzadeh, "Over-the-Cell Routing for New Cell Models," Proceedings of the 1992 IEEE Design Automation Conference (DAC'92) with N. Holmes and N. Sherwani, pp. 604-607.
228. J.D. Cho, K. F. Liao and M. Sarrafzadeh, "Multilayer Routing Algorithm for High Performance MCMs," Proceedings of ASIC'92: Fifth Annual IEEE International ASIC Conference and Exhibit, with J. D. Cho and K. F. Liao, Rochester, NY, September 1992, pp. 226-229.
229. D.S. Chen and M. Sarrafzadeh, "A Wire-length Minimization Algorithm for Single-layer Layouts," Proceeding of the International Conference on Computer-Aided Design (ICCAD-92) with D.S. Chen, pp. 390-393.
230. D.T. Lee and M. Sarrafzadeh, "Restricted Track Assignment with Application," Proceedings of the International Symposium on Algorithms and Computation, with D. T. Lee, Nagoya, Japan, December 1992.

231. F. Wagner, D. Wagner, K. Weihe and M. Sarrafzadeh, "Wiring Knock-knee Layouts: A Global Approach," Proceedings of the International Symposium on Algorithms and Computation, Nagoya, Japan, December 1992.
232. K. H. Yeap and M. Sarrafzadeh, "An Integrated Algorithm designed for Optimal Floorplan Sizing and Enumeration," Proceedings of the 1993 European Design Automation Conference, Paris, France, February 1993, pp. 29 – 33.
233. G. Robins, J. Cong, A. B. Kahng and M. Sarrafzadeh, "Minimum Density Interconnection Trees," Proceeding of the 1993 International Symposium on Circuits and Systems (ISCAS-93) pp 1865-1868.
234. S.Raje and M. Sarrafzadeh, "GEM: A Geometric Algorithm for Scheduling," Proceeding of the 1993 International Symposium on Circuits and Systems (ISCAS-93) May 1993.
235. M. Sriram, S. Kang, J.D. Cho, S. Raje and M. Sarrafzadeh, "Crosstalk-Minimum Layer Assignment," Proceedings of the Custom Integrated Circuits Conference, San Diego, CA, May 1993, pp. 29.7.1 - 29.7.4.
236. J.D. Cho and M. Sarrafzadeh, "A Buffer Redistribution Algorithm for High-Speed Clock Routing," Proceedings of the 1993 IEEE Design Automation Conference (DAC'93) pp. 537-543. **(Best paper award)**
237. M. Sriram, S. Kang, J.D. Cho, S. Raje and M. Sarrafzadeh, "A Multilayer Assignment Algorithm for Interference Minimization," Proceedings of the 4th ACM-SIGDA Physical Design Workshop, Lake Arrowhead, CA, April 19-21, 1993, pp. 63-67.
238. M. Sarrafzadeh, "Transforming an Arbitrary Floorplan into a Sliceable One," Proceedings of the International Conference on Computer-Aided Design (ICCAD-93) pp. 386-389.
239. A. Farrahi and M. Sarrafzadeh, "On the Lookup-table Minimization Problem for FPGA Technology Mapping," Proceedings of the Workshop on FPGAs, Berkeley, CA, February 13-15, 1994.
240. J.D. Cho and Y. Kajitani and M. Sarrafzadeh, "New Approximation Results on Graph Matching and Related Problems," Proceedings of the 20th International Workshop (WG-1994) Vol. 903, pp. 343-358.
241. A. Farrahi and M. Sarrafzadeh, "FPGA Technology Mapping for Power Minimization," Proceedings of the Workshop on Field Programmable Logic and Applications (FPL'94) Prague, CZ, September 7-9, pp. 66-77.
242. J. D. Cho and Salil Raje and M. Sarrafzadeh, "New Approximation Results for Maxcut and Related Problems," Proceedings of the 2nd Annual European Symposium on Algorithms (ESA'94) Utrecht, Netherlands, September 1994, pp. 148-158.
243. G. Tellez and M. Sarrafzadeh, "Clock Period Constrained Minimal Buffer Insertion in Clock Trees," Proceedings of the International Conference on Computer-Aided Design,

- 244. W. Lin, C. K. Wong and M. Sarrafzadeh, "The Reproducing Placement Problem with Application," Proceedings of the International Conference on Computer-Aided Design, ICCAD-94; pp. 686-689.
- 245. W. Lin and M. Sarrafzadeh, "A Linear Arrangement Problem with Applications," Proceedings of the 1995 International Symposium on Circuits and Systems (ISCAS) April 1995, Seattle, WA, pp. 57-60.
- 246. D. S. Chen, G. Yeap and M. Sarrafzadeh, "State Encoding of Finite State Machines for Low Power Design," Proceedings of the 1995 International Symposium on Circuits and Systems (ISCAS) Seattle, WA, April 1995.
- 247. G. Tellez and M. Sarrafzadeh, "On Rectilinear Distance Preserving Steiner Trees," Proceedings of the 1995 International Symposium on Circuits and Systems (ISCAS) Seattle, WA , April 1995, pp. 163-166.
- 248. A. Farrahi and G. Tellez and M. Sarrafzadeh, "Memory Segmentation to Exploit Sleep Mode Operation," Proceedings of the 32nd Design Automation Conference (DAC) June 1995, pp. 36-41.
- 249. E. Frank and S. Raje and M. Sarrafzadeh, "Constrained Register Allocation in Bus Architectures," Proceeding of the 1995 Design Automation Conference (DAC).
- 250. A. Farrahi and M. Sarrafzadeh, "Interval Graph Partitioning for Clique-width Maximization," Proceedings of the 26th International Conference on Combinatorics, Graph Theory and Computing, Boca Raton, FL, March 1995.
- 251. S. Raje and M. Sarrafzadeh, "Variable Voltage Scheduling," Proceedings of the 1995 International Symposium on Low Power Design," Dana Point Resort, Dana Point, CA April 23-26, 1995.
- 252. A. Farrahi and M. Sarrafzadeh, "System Partitioning to Maximize Sleep Time," Proceedings of the International Conference on Computer-Aided Design (ICCAD) San Jose, CA, November 1995, pp. 452-455.
- 253. A. Farrahi, G. Tellez and M. Sarrafzadeh, "Activity-Driven Clock Design for Low Power Circuits," Proceedings of the International Conference on Computer-Aided Design (ICCAD) San Jose, CA, November 1995, pp. 62-65.
- 254. D. Knol, G. Tellez and M. Sarrafzadeh, "A Graph-Based Delay Budgeting Algorithm for Large Scale Timing-Driven Placement Problems," Proceedings of the 5th ACM SIGDA Physical Design Workshop, Reston, VA, April 15-17, 1996.
- 255. D.S. Chen and M. Sarrafzadeh, "An Exact Algorithm for Low-Power Gate Resizing," Proceedings of the 1996 Design Automation Conference (DAC-96).
- 256. D.S. Chen and M. Sarrafzadeh, "Cube-Embedding Based State Encoding," Proceedings of the Asia South Pacific DAC (ASP-DAC97) Tokyo, Japan, January 1997.

257. J. Crenshaw and M. Sarrafzadeh, "An Accurate Behavioral Level Power Estimator," Proceedings of the ED & TC 1997, Paris, France, March 1997.
258. D. Knol, G. Tellez and M. Sarrafzadeh, "A Solution to Large Scale Timing-Driven Placement Problems," Proceedings of the 1997 Design Automation Conference (DAC-97).
259. A. Farrahi and M. Sarrafzadeh, "TDD: Fast Technology Mapping with Accurate Prediction," Proceedings of the ASIC'97: Annual IEEE International ASIC Conference and Exhibit.
260. M. Enos, S. Hauck and M. Sarrafzadeh, "Logic Partitioning with Replication," Proceedings of the International Conference on Computer-Aided Design (ICCAD 97).
261. M. Wang and M. Sarrafzadeh, "NRG: Global and Detailed Placement," Proceedings of the International Conference on Computer-Aided Design (ICCAD 97).
262. P. Banerjee, S. Roy and M. Sarrafzadeh, "Partitioning Sequential Circuits for Low Power, Low Power Circuit Partitioning," Proceeding of the 11th International Conference on VLSI Design.
263. J. Crenshaw and M. Sarrafzadeh, "Low-Power Driven Scheduling and Binding," Proceedings of the 1997 Great Lakes Symposium on VLSI, Lafayette, LA, February 19-21, 1998.
264. K. Bazargan, S. Kim and M. Sarrafzadeh, "Nostradamus: Floorplanner of Uncertain Designs," Proceedings of the 1998 International Symposium on Physical Design (ISPD).
265. M. Wang, P. Banerjee and M. Sarrafzadeh, "Placement with Incomplete Data," Proceedings of the 1998 Design Automation Conference (DAC-98).
266. P. Prabhakaran, J. Crenshaw, P. Banerjee and M. Sarrafzadeh, "Simultaneous Scheduling, Binding and Floorplanning for Interconnect Power Optimization," Proceedings of the 1999 VLSI Design Conference, Goa, India, January 1999.
267. J. Crenshaw, P. Prabhakaran, P. Banerjee and M. Sarrafzadeh, "An Incremental Floorplanner," Proceeding of the 1998 Great Lakes Symposium on VLSI, March 4-6, Ann Arbor, MI.
268. S. Raje and M. Sarrafzadeh, "Scheduling with Multiple Voltages under Resource Constraints," Proceedings of the 1999 International Symposium on Circuits and Systems (ISCAS) pp. 350-353, May 30-June 2, 1999, Miami, FL.
269. M. Sarrafzadeh and T. Takahashi, "A Fast Algorithm for Routability Testing," Proceedings of the 1999 International Symposium on Circuits and Systems (ISCAS) May 30 - June 2 1999, Miami, FL.
270. M. Wang and M. Sarrafzadeh, "Congestion Minimization During Placement," Proceedings of the 1999 International Symposium on Physical Design (ISPD 99)

Monterey, CA.

271. A. Ranjan, K. Bazargan and M. Sarrafzadeh, "Floorplanning 1000 times Faster," Proceedings of the System Level Interconnect Prediction (SLIP 99).
272. M. Sarrafzadeh and M. Wang, "Can Fast Algorithms Be Used as Good Predictors?" Proceedings of the System Level Interconnect Prediction (SLIP 99). **(Position Statement)**
273. K. Bazargan, R. Kastner and Majid Sarrafzadeh, "3-D Floorplanning: Simulated Annealing and Greedy Placement Methods for Reconfigurable Computing Systems," Proceedings of the 10th IEEE International Workshop on Rapid System Prototyping, Sheraton Sandkey, Clearwater, FL June 16-18, 1999.
274. K. Bazargan and M. Sarrafzadeh, "Fast Online Placement for Reconfigurable Computing Systems," Proceedings of the IEEE FCCM: Symposium on Field Programmable Custom Computing Machines, Napa Valley, CA, April 21-23, 1999.
275. C. Chen and M. Sarrafzadeh, "Slack Equalization Algorithm: Precise Slack Distribution for Low-Level Synthesis and Optimization," Proceedings of the International Workshop on Logic Synthesis (IWLS) Lake Tahoe, CA, June 1999, pp. 190-192.
276. ICCAD 1999 full day tutorial, "Modern Physical Design: Algorithm, Technology and Methodology."
277. C. Chen and M. Sarrafzadeh, "Power Reduction by Simultaneous Voltage Scaling and Gate Sizing," Proceedings of the ASP-DAC 2000, Yokohama, Japan, pp. 333-338.
278. C. Chen and M. Sarrafzadeh, "An Effective Algorithm for Gate-Level Power-Delay Tradeoff Using Two Voltages," Proceedings of the ICCD, October 1999, Austin, TX, pp. 222-2327.
279. M. Sarrafzadeh and M. Wang, "Interaction Among Cost Function During Placement," Proceedings of the International Conference on VLSI and CAD, Seoul, Korea, October 26-29, 1999. **(Invited Paper)**
280. R. Kastner, K. Bazargan and M. Sarrafzadeh, "Physical Design of Reconfigurable Computing Systems with Firm Macros," Proceedings of the Workshop on Reconfigurable Computing (WoRC'99), October 1999.
281. C. Chen and M. Sarrafzadeh, "Provably Good Algorithm for Low Power Consumption with Dual Supply Voltages," to appear in Proceedings of the International Conference on Computer-Aided Design, ICCAD, November 7-10, 1999, pp. 76-79.
282. S. Ogrenci, K. Bazargan and M. Sarrafzadeh, "Image Analysis and Partitioning for FPGA Implementation of Image Restoration," Proceedings of the IEEE Workshop on Signal Processing Systems, 2000, pp. 346-355.
283. M. Wang and M. Sarrafzadeh, "Modeling and Minimization of Routing Congestion," Proceedings of the Asia South Pacific Design Automation Conference (ASP-DAC 2000)

China.

- 284. M. Wang, S. Lim, J. Cong and Majid Sarrafzadeh, "Multi-way Partitioning Using Bi-partition Heuristics," Proceedings of the Asia South Pacific Design Automation Conference (ASP-DAC 2000) China.
- 285. A. Farrahi, D. Hathaway, M. Wang and M. Sarrafzadeh, "Quality of EDA CAD Tools: Definitions, Metrics and Directions," Proceedings of ISQED 2000, March, San Jose, CA. **(Invited paper)**
- 286. S. Ogrenci, A. Katsaggelos and M. Sarrafzadeh, "FPGA Analysis and Implementation of Image Restoration," Poster presentation at the ACM International Symposium on Field Programmable Gate Arrays (FPGA 2000) Monterey, CA, February 10-11, 2000.
- 287. K. Bazarga, A. Ranjan and M. Sarrafzadeh, "Fast and Accurate Estimation of Floorplans in Logic/High-level Synthesis," Proceedings of the 2000 Great Lakes Symposium on VLSI (GLSVLSI 2000) Chicago, IL, March 2-4, 2000, pp. 95-100.
- 288. M. Wang, X. Yang, K. Eguro and M. Sarrafzadeh, "Multi-Center Congestion Minimization During Placement," Proceedings of the International Symposium on Physical Design (ISPD) April 2000, pp. 147-152.
- 289. M. Wang, X. Yang, K. Eguro and M. Sarrafzadeh, "A Snap-On Placement Tool," Proceedings of the International Symposium on Physical Design (ISPD) April 2000, pp. 153-158.
- 290. J. Cong and M. Sarrafzadeh, "Incremental Physical Design," Proceedings of the International Symposium on Physical Design (ISPD 2000). **(Invited paper)**
- 291. K. Bazargan, R. Kastner, S. Ogrenci and M. Sarrafzadeh, "A C to Hardware/Software Compiler," Proceedings of the IEEE Symposium on Field Programmable Custom Computing Machines (IEEE: FCCM) Napa Valley, CA, April 21-23, 2000.
- 292. A. Nayak, P. Banerjee, C. Chen and M. Sarrafzadeh, "Power Optimization Issues in Dual Voltage Design," ICDA 2000 (part of World Computer Congress 2000) Beijing, China, August 21-25, 2000, pp. 99-105.
- 293. A. Srivatsava, R. Kastner, M. Sarrafzadeh, "Gate Duplication for Performance Optimization," Proceedings of the International Workshop on Logic Synthesis (IWLS) Los Angeles, CA, June 2000.
- 294. A. Srivastava, R. Kastner and M. Sarrafzadeh, "Complexity Issues in Gate Duplication," Proceedings of the International Workshop on Logic Synthesis (IWLS) June 2000.
- 295. A. Ranjan, K. Bazargan and M. Sarrafzadeh, "Fast Hierarchical Floorplanning with Congestion and Timing Control," Proceedings of the International Conference on Computer Design (ICCD), Austin, TX, September 17-20, 2000, pp. 357-362.
- 296. A. Nayak, M. Haldar, P. Banerjee, C. Chen and M. Sarrafzadeh, "Power Optimization of Delay Constrained Circuits," Proceedings of the 2000 ASIC/SOC Conference,

297. R. Kastner, E. Bozorgzadeh and M. Sarrafzadeh, "Coupling Aware Routing," Proceedings of the IEEE International ASIC/SOC Conference, Washington, D.C., September 2000.
298. A. Srivatsava, R. Kastner and M. Sarrafzadeh, "Timing Driven Gate Duplication: Complexity Issues and Algorithms," Proceedings of the International Conference on Computer-Aided Design (ICCAD) San Jose, CA, November 2000, pp. 447-450.
299. C. Chen, X. Yang and M. Sarrafzadeh, "Potential Slack: An Effective Metric of Combinational Circuit Performance," Proceedings of the International Conference on Computer-Aided Design (ICCAD) San Jose, CA, November 2000, pp. 198-201.
300. M. Wang, X. Yang, K. Eguro and M. Sarrafzadeh, "Dragon2000: Placement of Industrial Circuits," Proceedings of the International Conference on Computer-Aided Design (ICCAD) November 2000, pp. 260-263.
301. R. Kastner, E. Bozorgzadeh and M. Sarrafzadeh, "Predictable Routing," Proceedings of the ACM/IEEE International Conference on Computer-Aided Design (ICCAD) November 2000.
302. A. Kahng and M. Sarrafzadeh, "Modern Physical Design," Tutorial from the International Conference on Computer-Aided Design (ICCAD) 2000. **(Tutorial)**
303. J. Cong, O. Coudert and M. Sarrafzadeh, "Incremental CAD," Embedded Tutorial from the International Conference on Computer-Aided Design (ICCAD) 2000. **(Tutorial)**
304. K. Bazargan, S. Ogrenci and M. Sarrafzadeh, "A Fast Scheduling and Placement Method for C to Hardware/Software Compilation," Reconfigurable Techniques for Computing, Part of Photonics East Conference, Boston, MA, November 5-8.
305. S. Ogrenci, K. Bazarga and M. Sarrafzadeh, "Image Analysis and Partitioning for FPGA Mapping," IEEE Workshop on Signal Processing Systems (SiPS) Lafayette, LA, 2000.
306. A. Srivatsava, C. Chen and M. Sarrafzadeh, "Timing Driven Gate Duplication in Technology Independent Phase," Proceedings of the ACM/IEEE Asia South Pacific Design Automation Conference (ASP-DAC) Yokohama, Japan, Jan 31-Feb 2, 2001.
307. E. Bozorgzadeh, S. Ogrenci and M. Sarrafzadeh, "R-Pack: Routability-Driven Packing for Cluster-Based FPGAs," Proceedings of the Asia South Pacific Design Automation Conference (ASP-DAC) Yokohama, Japan, Jan 31-Feb 2, 2001.
308. A. Ranjan, A. Srivatsava, V. Karnam and M. Sarrafzadeh, "Layout Aware Retiming," Proceedings of the ACM/SIGDA Great Lakes Symposium on VLSI: GLSVLSI, March 2001.
309. Tutorial with Xilinx et al on "Field Programmable Devices," DAC 2001. **(Tutorial)**
310. X. Yang, E. Bozorgzadeh and M. Sarrafzadeh, "Wirelength Estimation Based on Rent

311. S. Ogrenci, E. Bozorgzadeh, R. Kastner and M. Sarrafzadeh, “Strategically Reconfigurable Gate Arrays,” Proceedings of the Reconfigurable Architecture Workshop (RAW) April 2001.
312. R. Kastner, E. Bozorgzadeh and M. Sarrafzadeh, “An Exact Alogrithm for Coupling-Free Routing,” Proceedings of the ACM/IEEE International Symposium on Physical Design (ISPD) April 2001.
313. S. Ogrenci Memik, E. Bozorgzadeh, R. Kastner and M. Sarrafzadeh, “SPS: Strategically Programmable Systems,” Proceedings of the Reconfigurable Architecture Workshop (RAW) San Francisco, CA, April 2001.
314. M. Sarrafzadeh, E. Bozorgzadeh, R. Kastner and A. Srivastava, “Design and Analysis of Physical Design Algorithms,” Proceedings of the ACM/SIGDA International Symposium on Physical Design (ISPD) April 2001.
315. X. Yang, R. Kastner and M. Sarrafzadeh, “Congestion Estimation During Top-down Placement,” Proceedings of the International Symposium on Physical Design 2001 (ISPD) Sonoma County, CA, April 1-4, 2001, pp. 164-169.
316. M. Sarrafzadeh and students, “Fundamental Graph Algorithms in Physical Design,” Proceedings of the International Symposium on Physical Design 2001 (ISPD) Sonoma County, CA, April 1-4, 2001. **(Invited Paper)**
317. A. Srivatsava, C. Chen and M. Sarrafzadeh, “Exact Algorithm for Modifying Buffer Trees Using Buffer Duplication in a Delay Optimization Perspective,” Proceedings of the ACM/SIGDA International Workshop on Logic Synthesis (IWLS) June 2001, pp. 179-184.
318. E. Bozorgzadeh, R. Kastner and M. Sarrafzadeh, “Creating and Exploiting Flexibility in Steiner Trees,” Proceedings of the ACM/IEEE Design Automation Conference (DAC) Las Vegas, NV, June 2001, pp. 195-198.
319. P. Schaumont, I. Verbawhede, K. Keutzer and M. Sarrafzadeh, “A Quick Safari Through the Reconfigurable Jungle,” Las Vegas Convention Center, June 2001, pp. 172-177. **(Invited Paper)**
320. K. Bazargan, S. Ogrenci, and M. Sarrafzadeh, “Integrated Scheduling and Physical Design into a Coherent Compilation Cycle for Reconfigurable Computing Architectures,” Proceedings of the IEEE/ACM Design Automation Conference (DAC) Las Vegas Convention Center, June 2001, pp. 635-640. **(Best Paper Award Nomination)**
321. A. Srivastava, R. Kastner and M. Sarrafzadeh, “On the Complexity of Gate Duplication,” Proceedings of the IEEE Transactions on Computer-Aided Design (TCAD) September 2001, Vol. 20, pp. 1170-1176.

322. A.B. Kahng, R. Kastner, S. Mantik, M. Sarrafzadeh and X. Yang, "Studies of Timing Structural Properties for Early Evaluation of Circuit Design," (SASIMI) Japan, October 2001.
323. R. Kastner, S. Ogrenci-Memik, E. Bozorgzadeh and M. Sarrafzadeh, "Instruction Generation for Hybrid Reconfigurable Systems," Proceedings of the ACM/IEEE International Conference on Computer-Aided Design (ICCAD) San Jose, CA, November 2001.
324. X. Yang, R. Kastner and M. Sarrafzadeh, "Congestion Reduction During Placement Based on Integer Programming," Proceedings of the International Conference on Computer-Aided Design (ICCAD) San Jose, CA, November 2001, pp. 573-576.
325. S. Ogrenci-Memik, E. Bozorgzadeh, R. Kastner and M. Sarrafzadeh, "A Super-Scheduler for Embedded Reconfigurable Systems," Proceedings of the IEEE/ACM International Conference on Computer-Aided Design (ICCAD) San Jose, CA, November 2001.
326. C. Chen and M. Sarrafzadeh, "Power-Manageable Scheduling Technique for Control Dominated High-Level Synthesis," 2002.
327. C. Chen, A. Srivastava and M. Sarrafzadeh, "Budget Management and its Applications," *Algorithmica*, 2002, pp. 261-275.
328. S. Ogrenci-Memik, A. Srivatsava and M. Sarrafzadeh, "Design under Uncertainties," Proceedings of the International Symposium on Circuits & Systems (ISCAS 2002); special session on Computational Graph Theory for Computer and Communication Systems, Phoenix, AZ.
329. E. Bozorgzadeh, S. Ogrenci-Memik, R. Kastner and M. Sarrafzadeh, "Pattern Selection in Programmable Systems," Poster Presentation at the International Symposium of Field Programmable Gate Arrays (FPGA) Monterey, CA, February 2002.
330. X. Yang, B.K. Choi and M. Sarrafzadeh, "Routability Driven White Space Allocation for Fixed-die Standard-cell Placement," ISPD 2002, San Diego, CA, April 2002, pp. 42-47.
331. S. Ogrenci-Memik, A. Srivatsava, E. Kursun and M. Sarrafzadeh, "Algorithmic Aspects of Uncertainty Driven Scheduling," Proceedings of the IEEE International Symposium on Circuits and Systems (ISCAS) Scottsdale, AZ, May 2002.
332. A. Srivastava, J. Sobaje, M. Potkonjak and M. Sarrafzadeh, "Optimal Node Scheduling for Effective Energy Usage in Sensor Networks," Proceedings of the IEEE Workshop on Integrated Management of Power Aware Communications, Computing and Networking, May 2002.
333. R. Kastner, C. Hsieh, M. Potkonjak and M. Sarrafzadeh, "On the Sensitivity of Incremental Algorithms for Combinatorial Auctions," UCLA Computer Science Department Technical Report 020000, January 2002, Proceedings of the IEEE International Workshop on Advanced Issues of E-Commerce & Web-Based Information

- 334. E. Bozorgzadeh, S. Ogrenci-Memik, R. Kastner and M. Sarrafzadeh, "Pattern Selection: Customized Block Allocation for Domain-Specific Programmable Systems," Proceedings of the International Conference on Engineering of Reconfigurable Systems and Algorithms (ERSA) June 2002.
- 335. E. Bozorgzadeh, S. Ogrenci-Memik, R. Kastner and M. Sarrafzadeh, "Customized Block Allocation for Domain-Specific Programmable Systems," Poster presentation at the 2002 International Conference on Engineering of Reconfigurable Systems and Algorithms (ERSA) Las Vegas, NV, June 24-27, 2002.
- 336. A. Srivatsava and M. Sarrafzadeh, "Predictability Driven Binding," Proceedings of the IEEE/ACM International Workshop on Logic & Synthesis (IWLS), New Orleans, LA, June 4-7, 2002.
- 337. E. Kursun, A. Srivastava, S. Ogrenci-Memik and M. Sarrafzadeh, "Early Evaluation Techniques for Low Power Binding," Proceedings of the ISLPED'02: ACM/IEEE International Symposium on Low Power Electronics and Design (ISLPED) Monterey, CA, August 2002.
- 338. C. Chen, C. Kang, and M. Sarrafzadeh, "Activity-Sensitive Clock Tree Construction for Low Power," Poster presentation at the ISLPED'02: ACM/IEEE International Symposium on Low Power Electronics and Design, Monterey, CA, August 2002.
- 339. Yang, B.K. Choi and M. Sarrafzadeh, "Standard-Cell Placement Tool for Designs with High Row Utilization," Proceedings of the International Conference on Computer Design (ICCD) Freiburg, Germany, September 16-18, 2002.
- 340. P. Brisk, A. Kaplan, R. Kastner, and M. Sarrafzadeh, "Instruction Generation and Regularity Extraction for Reconfigurable Processors," Proceedings of the International Conference on Compilers, Architecture and Synthesis for Embedded Systems (CASES) Grenoble, France, October 8-11, 2002.
- 341. S. Ghiassi, K. Nguyen, and M. Sarrafzadeh, "A General Framework for Tracking Objects in a Multi-Camera Environment," Proceedings of the Third International Workshop on Digital and Computational Video (DCV '02) Florida, November 2002, pp. 200-204.
- 342. A. Srivastava and M. Sarrafzadeh, "Predictability: Definition Analysis and Optimization," Proceedings of the IEEE/ACM International Conference on Computer Aided Design (ICCAD) November 2002.
- 343. X. Yang, B.K. Choi and M. Sarrafzadeh, "Timing-Driven Placement using Design Hierarchy Guided Constraint Generation," Proceedings of the International Conference on Computer-Aided Design (ICCAD) November 2002.
- 344. R. Jafari, H. Fan and M. Sarrafzadeh, "A Programmable System with Quick Reconfiguration," Proceedings of DesignCon, San Jose, CA, January 2003.

345. S. Ghiasi and M. Sarrafzadeh, "Optimal Reconfiguration Sequence Management," Proceedings of the Asia South Pacific Design Automation Conference (ASPDAC) January 2003, pp. 359-365.
346. Kaplan, M. Sarrafzadeh and R. Kastner, "High-Level Data Communication Optimization for Reconfigurable Systems," Proceedings of the Workshop on Software Support for Reconfigurable Systems (SSRS), in conjunction with the International Symposium on High-Performance Computer Architecture (HPCA) February 2003.
347. S. Ghiasi, K. Nguyen, E. Bozorgzadeh and M. Sarrafzadeh, "On Computation and Resource Management in an FPGA-based Computing Environment," A poster at the International Symposium on Field-Programmable Gate Arrays (FPGA) February 2003, page 243.
348. S. Kumar, S. Ghiasi, M. Srivastava, "Dynamic Adaptation of Networked Reconfigurable Systems," Proceedings of the Workshop on Software Support for Reconfigurable Systems (SSRS) February 2003.
349. S. Ghiasi, H. J. Moon and M. Sarrafzadeh, "Collaborative and Reconfigurable Object Tracking," Proceedings of the International Conference on Engineering of Reconfigurable Systems and Algorithms (ERSA) Las Vegas, NV, June 2003, pp.13-20.
350. R. Jafari, He. Fan and M. Sarrafzadeh, "Micro-Sequencer Approach Speeds Reconfiguration," COTS Journal, June 2003.
351. Kaplan, P. Brisk, and R. Kastner, "Data Communication Estimation and Reduction for Reconfigurable Systems," Proceedings of the 40th Design Automation Conference (DAC) June 2003.
352. E. Bozorgzadeh, S. Ghiasi, A. Takahashi and M. Sarrafzadeh, "Optimal Integer Delay Budgeting on Directed Acyclic Graphs," Proceedings of the ACM/IEEE Design Automation Conference (DAC) June 2003, Anaheim, CA, pp. 920-925.
353. B.K. Choi. H. Xu, and M. Sarrafzadeh, "Flow-Based Cell Moving Algorithm for Desired Cell Distribution," Proceedings of the International Conference on Computer Aided Design (ICCAD) 2003.
354. S. Ghiasi, H. J. Moon and M. Sarrafzadeh, "Improving Performance and Quality through Hardware Reconfiguration: Potentials and Adaptive Object Tracking Case Study," Proceedings of the Workshop on Embedded Systems for Real-Time Multimedia (ESTIMedia) Newport Beach, CA, October 2003, pp. 149-155.
355. Srivastava, S. Ogrenci-Memik, B.K. Choi and M. Sarrafzadeh, "Achieving Design Closure Through Delay Relaxation Parameter," Proceedings of the IEEE/ACM International Conference on Computer Aided Design (ICCAD) San Jose, CA, November 2003.
356. S. Ghiasi, E. Bozorgzadeh, K. Nguyen and M. Sarrafzadeh, "On Computation and Resource Management in Networked Embedded Systems," Proceedings of the International Conference on Parallel and Distributed Computing and Systems, Marina

357. S. Ghiasi, K. Nguyen and M. Sarrafzadeh, "Profiling Accuracy Latency Characteristics of Collaborative Object Tracking Applications," Proceedings of the International Conference on Parallel and Distributed Computing and Systems, Marina Del Rey, CA, November 2003, pp. 694-701.
358. P. Brisk, A. Kaplan and M. Sarrafzadeh, "Parallel Analysis of the Rijndael Block Cipher," Proceedings of the International Conference on Parallel and Distributed Computing and Systems (IASTED-PDCS) Marina Del Rey, CA, November 3-5, 2003.
359. A. Nahapetian, S. Ghiasi and M. Sarrafzadeh, "Task Scheduling on Heterogeneous Resources with Heterogeneous Reconfiguration Costs," Proceedings of the Parallel and Distributed Computing and Systems (PDCS): Special Session on Synthesis for Programmable System, November 2003, pp. 916-921.
360. C. Chen, et al., "Reconfigurable Fabric: An Enabling Technology for Pervasive Medical Monitoring," Proceedings of the Communication Networks and Distributed Systems Modeling and Simulation Conference (CNDS) San Diego, CA, January 2004.
361. F.C. Chen, F. Dabiri, R. Jafari, E. Kursun, V. Raghunathan, T. Schoellhammer, D. Sievers, D. Estrin, G. Reinman, M. Sarrafzadeh, M. Srivastava, B. Wu and Y. Yang, "Reconfigurable Fabric: An Enabling Technology for Pervasive Medical Monitoring," Proceedings of the Communication Networks and Distributed Systems Modeling and Simulation Conference (NDS) San Diego, CA, January 18-24 2004.
362. P. Brisk and M. Sarrafzadeh, "Framework and Design Methodology for a Compiler that Compresses Code Using Echo Instructions," Proceedings of the 2nd Workshop on Optimization for DSP and Embedded Systems (ODES-2) March 2004.
363. P. Brisk and M. Sarrafzadeh, "Framework and Design Methodology of a Compiler that Compresses Code using Echo Instructions," ODES-2: Proceedings of the 2nd Workshop on Optimizations for DSP and Embedded Systems, The Sheraton Hotel and Conference Center, Palo Alto, CA, March 21, 2004.
364. S. Ghiasi, E. Kursun and M. Sarrafzadeh, "Transistor Level Budgeting for Power Optimization," Proceedings of the International Symposium on Quality Electronic Design (ISQED) 2004, San Jose, CA, pp. 116-121.
365. T. Taghavai, S. Ghiasi, A. Ranjan, S. Raje and M. Sarrafzadeh, "Innovate or Perish: FPGA Physical Design," International Symposium on Physical Design (ISPD) Phoenix, AZ, April 2004, pp. 148-155.
366. Chiang, B.K. Choi and M. Sarrafzadeh, "Routing Resources Consumption on M-arch and X-arch," Proceedings of the International Symposium on Circuits and Systems (ISCAS) Vancouver, Canada, May 23-26, 2004.
367. P. Brisk and M. Sarrafzadeh, "Framework and Design Methodology for a Compiler that Compresses Code Using Echo Instructions," Proceedings of the Southern California Workshop on Parallel and Distributed Processing and Architecture, May 2004.

368. P. Brisk, A. Kaplan and M. Sarrafzadeh, "Area Efficient Instruction Set Synthesis for Reconfigurable System-on-Chip Designs," Proceedings of the 41st Design Automation Conference (DAC) June 7-11, 2004, pp. 395-400.
369. E. Bozorgzadeh, S. Ghiassi, A. Takahashi and M. Sarrafzadeh, "Incremental Timing Budget Management in Programmable Systems," Proceedings of the International Conference on Embedded and Reconfigurable Systems and Architecture, July 2004.
370. P. Brisk, A. Nahapetian and M. Sarrafzadeh, "Instruction Selection for Compilers that Target Architectures with Echo Instructions," Proceedings of the 8th International Workshop on Software and Compilers for Embedded Systems (SCOPES) September 2004.
371. R. Jafari, F. Dabiri and M. Sarrafzadeh, "Reconfigurable Fabric Vest for Fatal Heart Disease Prevention," Proceedings of the 3rd International Workshop on Ubiquitous Computing for Pervasive Healthcare Applications in conjunction with UbiComp'04 (UbiHealth) Nottingham, UK, September 2004.
372. S. Ghiassi, E. Bozorgzadeh, S. Choudhury and M. Sarrafzadeh, "A Unified Theory for Timing Budget Management," Proceedings of the ACM/IEEE International Conference on Computer-Aided Design (ICCAD) November 2004, pp. 653-659.
373. T. Taghavi, X. Yang, BK Choi, M. Wang and M. Sarrafzadeh, "Dragon 2005: Large Scale Mixed-Sized Placement Tool," Proceedings of the International Symposium on Physical Design (ISPD) Placement Design Contest 2005.
374. R. Kastner, P. Brisk, A. Kaplan, F. Brewer and M. Sarrafzadeh, "Physically Aware Data Communication Optimization for Hardware Synthesis," Proceedings of the International Workshop on Logic and Synthesis (IWLS 2005).
375. R. Jafari, F. Dabiri, P. Brisk and M. Sarrafzadeh, "Adaptive and Fault Tolerant Medical Vest for Life-Critical Medical Monitoring," Proceedings of the 20th ACM Symposium on Applied Computing (SAC) Santa Fe, NM, March 13-17, 2005.
376. R. Jafari, F. Dabiri, B.K. Choi and M. Sarrafzadeh, "Efficient Placement and Routing in Grid-Based Networks," Poster presentation at the 20th ACM Symposium on Applied Computing (SAC) Santa Fe, NM, March 2005.
377. P. Brisk, J. Macbeth, F. Dabiri and M. Sarrafzadeh, "Polynomial-Time Graph Coloring Register Allocation," Proceedings of the International Workshop on Logic and Synthesis (IWLS 2005).
378. P. Brisk, J. Macbeth, A. Nahapetian and M. Sarrafzadeh, "A Dictionary Construction Technique for Code Compression Systems with Echo Instructions," Proceedings of the Conference on Languages Compilers and Tools for Embedded Systems (LCTES) 2005.
379. R. Jafari, S. Ogrenci-Memik and M. Sarrafzadeh, "Quick Reconfiguration in Clustered Micro-Sequencer," Proceedings of the 12th Reconfigurable Architectures Workshop (RAW) in conjunction with the International Computer Performance and Dependability

380. R. Jafari, F. Dabiri, P. Brisk and M. Sarrafzadeh “CustoMed: A Power Optimized Customizable and Mobile Medical Monitoring and Analysis System,” Proceedings of the ACM HCI Challenges in Health Assessment Workshop in conjunction with Computer Human Interaction (CHI) Portland, OR, April 2005.
381. R. Kastner, W. Gong, X. Hao, F. Brewer, A. Kaplan, P. Brisk and M. Sarrafzadeh, “Physically Aware Data Communication Optimization for Hardware Synthesis,” Proceedings of the International Workshop on Logic and Synthesis (IWLS) June 2005.
382. R. Jafari, A. Encarnacao, A. Zahoory, F. Dabiri, H. Noshadi and M. Sarrafzadeh, “Wireless Sensor Networks For Health Monitoring,” Proceedings of the Second ACM/IEEE International Conference on Mobile and Ubiquitous Systems (Accepted as a Short Paper) San Diego, CA, July 2005.
383. R. Jafari, F. Dabiri and M. Sarrafzadeh, “An Efficient Placement and Routing Technique for Fault-tolerant Distributed Embedded Computing,” Proceedings of the 11th IEEE International Conference on Embedded and Real-Time Computing Systems and Applications, Hong Kong, China, August 2005.
384. Ryan Kastner, Wenrui Gong§, Xin Hao§, Forrest Brewer§, Adam Kaplan†, Philip Brisk† and Majid Sarrafzadeh, “Layout Driven Data Communication Optimization for High-level Synthesis”, DATE 2006.
385. Ani Nahapetian, Foad Dabiri, Majid Sarrafzadeh, "Energy Minimization and Reliability for Wearable Medical Applications" International Conference on Parallel Processing (ICPP), August 2006.
386. Gao, Tia. Tammara Massey, Will Bishop, Daniel Bernstein, Leo Selavo, Alex Alm, David White, and Majid Sarrafzadeh. "Integration of Triage and Biomedical Devices for Continuous, Real-Time, Automated Patient Monitoring". 3rd IEEE-EMBS International Summer School and Symposium on Medical Devices and Biosensors (ISSS-MDBS 2006). Boston, MA. September 2006.
387. Gao, Tia. Tammara Massey, "An Integrated, Wireless Triage System and Biomedical Devices for Continuous, Real-Time, Automated Patient Monitoring". 3rd IEEE-EMBS International Summer School and Symposium on Medical Devices and Biosensors (ISSS-MDBS 2006). Boston, MA. September 2006.
388. Taraneh Taghavi and Majid Sarrafzadeh, "Blockage Oriented Placement,"IEEE Electronic. Design rocess Workshop, 2006.
389. Ryan Kastner, Wenrui Gong, Adam Kaplan, Philip Brisk, Majid Sarrafzadeh, Xin Hao, and Forrester Brewer, “*Layout Driven Data Communication Optimization for High Level Synthesis”*,/Design, Automation and Test in Europe Conference (DATE),/March 2006.
390. Philip Brisk, Foad Dabiri, Jamie Macbeth, and Majid Sarrafzadeh. “Polynomial Time Graph Coloring Register Allocation,” 14th International Workshop on Logic and

391. Taraneh Taghavi, Xiaojian Yang, BK Choi, Maogang Wang, and Majid Sarrafzadeh, “Dragon2006: Blocakage-Aware Congestion-Controlling Mixed-Sized Placer,” in Proc. of International Symposium on Physical Design (ISPD), 2006.
392. Taraneh Taghavi, Soheil Ghiasi, and Majid Sarrafzadeh, Routhing Algorithms: Architecture Driven Rerouting Enhancement for FPGAs,” in Proc. International Symposium on Circuits and Systems (ISCAS), 2006.
393. Tammara Massey, Tia Gao, Matt Welsh, Jonathan Sharp, and Majid Sarrafzadeh. “The Design of a Decentralized Electronic Triage System.” American Medical Informatics Association (AMIA). Washington, DC, November 2006.
394. Majid Sarrafzadeh, Foad Dabiri, Roozbeh Jafari, Tammara Massey, and Ani Nahapetan. “Low Power Light-Weight Embedded Systems.” International Symposium on Low Power Electronics and Design (ISLPED), Tegernsee, Germany, October 2006.
395. Foad Dairi, Ani Nahapetan, and Majid Sarrafzadeh. “General Delay Budgeting on Directed Acyclic Graphs with Applications in CAD.” Electronic Notes in Discrete Mathematics 27, pp. 95-96, 2006, Short Communication.
396. Roozbeh Jafari, Hyduke Noshadi, Soheil Ghiasi, Majid Sarrafzadeh, “Adaptive Medical Feature Extraction for Resource Constrained Distributed Embedded Systems.” The first IEEE International Workshop on Pervasive and Ubiquitous Health Care (UbiCare) in conjunction with PerCom, March 2006, Pisa, Italy.
397. Roozbeh Jafari, Devin L. Jindrich, V. Reggie Edgerton, Majid Sarrafzadeh, “CMAS: Clinical Movement Assessment System for Neuromotor Disorders,” IEEE Biomedical Circuits and Systems Conference (BioCAS), November-December 2006, London, UK.
398. Philip Brisk, Majid Sarrafzadeh, “Interference Graphs for Procedures in Static Single Information Form are Interval Graphs.” SCOPES 2007, Acropolis, Nice, France. April, 2007.
399. **Tutorial**, “Medical Embedded Systems,” IESS 2007 Conference, Irvine, CA May 29 – June 1, 2007.
400. Taraneh Taghavi and Majid Sarrafzadeh, “Heirarchical Concurrent Congestion and Wirelength Estimation in the Presence of IP Blocks,” IEEE Computer Society Annual Symposium on VLSI 2007. Porto Alegre, Brazil, May 2007.
401. Roozbeh Jafari, V. Reggie Edgerton and Majid Sarrafzadeh, “Reliability in Light-weight Medical Monitoring Platforms,” BSN2007 – Body Sensing Networks 4th International Workshop on Wearable and Implantable Body Sensor Networks. Aachen, Germany, March 26 – 28, 2007.
402. C.K. Lin, David Jea, Foad Dabiri, Tammara Massey, Robert Tan, Majid Sarrafzadeh, Mani Srivastava, Peter Schulam, Jacob Schmidt, “The Development of an In-vivo Active Pressure Monitoring System,” BSN2007 – Body Sensing Networks 4th

403. Ani Nahapetian, Paolo Lombardi, Andrea Acquaviva, Luca Benini, Majid Sarrafzadeh, "Dynamic Reconfiguration in Sensor Networks with Regenerative Energy Sources," Design Automation and Test Europe (DATE), April 2007.
404. Foad Dabiri, Roozbeh Jafari, Ani Nahapetian, Majid Sarrafzadeh, "A Unified Optimal Voltage Selection Methodology for Low-power Systems," International Symposium on Quality Electronic Design (ISQED), March 2007.
405. Taraneh Taghavi, Ani Nahapetian, Majid Sarrafzadeh, "System Level Estimation of Interconnect Length in the Presence of IP Blocks," International Symposium on Quality Electronic Design (ISQED), March 2007.
406. Taraneh Taghavi, Foad Dabiri, Ani Nahapetian, Majid Sarrafzadeh, "Congestion Prediction," Workshop on System Level Interconnect Prediction (SLIP), March 2007.
407. S. Nakatake, Z. Karimi, T. Taghavi, and M. Sarrafzadeh, "Block Placement to Ensure Channel Routability" to appear in ACM Great Lakes Symposium on VLSI (GLSVLSI), 2007.
408. Philip Brisk and Majid Sarrafzadeh, "Static Single Assignment Form and the Dominance Relation" IWLS'07
409. Philip Brisk and Majid Sarrafzadeh , "Multiplexer Optimization for High-Level Synthesis of Static Single Assignment Form Programs", IWLS'07
410. Tammara Masey et al, "Towards Reconfigurable Embedded Medical Systems" Joint Workshop On High Confidence Medical Devices, Software, and Systems (HCMDSS) and Medical Device Plug-and-Play (MD PnP) Interoperability, June 25-27, 2007 Boston, MA
411. Winston Wu, "A novel method and testbed for sensor management and patient diagnosis" Joint Workshop On High Confidence Medical Devices, Software, and Systems (HCMDSS) and Medical Device Plug-and-Play (MD PnP) Interoperability, June 25-27, 2007 Boston, MA
412. Foad Dabiri, Ani Nahapetian, Miodrag Potkonjak, Majid Sarrafzadeh , "Soft Error-Aware Power Optimization using Gate Sizing", Workshop on Power and Timing Modeling, Optimization and Simulation (PATMOS), September 2007
413. Ani Nahapetian, Sabah Chaudhry, Foad Dabiri, Tammara Massey, Hyduke Noshadi, Majid Sarrafzadeh, "Wireless Body Sensor Enhanced Tracking for Extended In-Home Care" Workshop on Wireless Sensor Networks for Health Care (WSNHC), June 2007.
414. **(Best Paper Award)**. W.H. Wu, L.K. Au, B. Jordan, T. Stathopoulos, M.A. Batalin, W.J. Kaiser, A. Vahdatpour, M. Sarrafzadeh, M. Fang and J. Chodosh, The SmartCane System: An Assistive Device for Geriatrics, Third International Conference on Body Area Networks (BodyNets 2008), March 13-17, 2008.

415. Daeki Cho, S. Lee, Alexander Chang, Tammara Massey, C. Chang, M. Tsai, Majid Sarrafzadeh, Mario Gerla. Opportunistic Medical Monitoring using Bluetooth P2P Networks. The 2nd International Workshop on Autonomic and Opportunistic Communications (AOC 2008) in conjunction with IEEE Symposium on a World of Wireless, Mobile and Multimedia Networks (WoWMoM 2008). Newport Beach, California. June 2008.
416. Maryam Moazeni, Alireza Vahdatpour, Karthik Gururag, Majid Sarrafzadeh, "Communication Bottleneck in Hardware Software Partitioning", In the proceedings of Sixteenth ACM/SIGDA International Symposium on Field-Programmable Gate Arrays (FPGA) 2008, Monterey, California
417. Tammara Massey, Rahul Kapur, Foad Dabiri, Linh Nam Vu, and Majid Sarrafzadeh. "Localization Using Low Resolution Optical Sensors", The 4th IEEE International Conference on Mobile Ad-Hoc and Sensor Systems (MASS 2007). Pisa, Italy. October 2007.
418. Foad Dabiri, Navid Amini, Mahsan Rofoui and Majid Sarrafzadeh, "Reliability-Aware Optimization for DVS-Enabled Real-Time Embedded Systems", to appear in Proceedings of 9th International Symposium on Quality Electronic Design (ISQED), San Jose CA, March 2008.
419. Foad Dabiri, Alireza Vahdatpour, Hyduke oshadi, Hagop Hagopian, Majid Sarrafzadeh, "Ubiquitous Personal Assistive System for Neuropathy", The 2nd International Workshop on Systems and Networking Support for Healthcare and Assisted Living environments. Breckenridge, Colorado. June 2008.
420. Foad Dabiri, Alireza Vahdatpour, Hyduke Noshadi, Majid Sarrafzadeh, "Constant Approximation Algorithm for MST in Resource Constrained Wireless Sensor Networks", 17th IEEE International Conference on Computer Communications and Networks, St. Thomas U.S. Virgin Islands, August 2008.
421. Hyduke Noshadi, Eugenio Giordano, Hagop Hagopian, Giovanni Pau, Mario Gerla and Majid Sarrafzadeh "Remote Medical Monitoring Through Vehicular Ad Hoc Network," 2nd IEEE International Symposium on Wireless Vehicular Communications (WiVeC'2008)
422. Foad Dabiri, Alireza Vahdatpour, Hyduke Noshadi, Hagop Hagopian, Majid Sarrafzadeh, "Electronic Orthotics Shoe: Preventing Ulceration in Diabetic Patients", International Conference of the IEEE Engineering in Medicine and Biology Society to be held in Vancouver, British Columbia, Canada, 20th - 24th August, 2008.
423. **(Best Paper Award)**. Foad Dabiri, Alireza Vahdatpour, Hyduke Noshadi, Hagop Hagopian, Majid Sarrafzadeh, "Ubiquitous Personal Assistive System for Neuropathy" The 2nd ACM International Workshop on Systems and Networking Support for Healthcare and Assisted Living Environments (HelathNet 2008)
424. Alireza Vahdatpour, Foad Dabiri, Maryam Moazeni, Majid Sarrafzadeh, Theoretical Bound and Practical Analysis of Minimum Connected Dominating Set in Ad Hoc and

425. Jamie McBeth and Majid Sarrafzadeh, "Scalable Medium Access Control for In-Network Data Aggregation", DialM-POMC Workshop on Foundations of Mobile Computing, Toronto, Canada on August 22nd, 2008.
426. Mahsan Rofouei, Maryam Moazeni, Majid Sarrafzadeh, "Fast GPU-based Space-Time Correlation for Activity Recognition in Video Sequences, proceedings of ESTIMedia 2008, Atlanta on October 23-24, 2008.
427. Amini, N., Matthews, J., Dabiri, F., Vahdatpor, A., Noshadi, H., Sarrafzadeh, M., "A WIRELESS EMBEDDED DEVICE FOR PERSONALIZED ULTRAVIOLET MONITORING", BioDevices 2009 (International Conference on Biomedical Electronic and Devices), January 14-17, Porto, Portugal.
428. Mahsan Rofouei, Thanos Stathopoulos, Sebi Ryffel, William Kaiser, Majid Sarrafzadeh, "Energy-Aware High Performance Computing with Graphic Processing Units", Hot Power (Workshop on Power Aware Computing and Systems) San Diego, CA, December 7, 2008.
429. Noshadi, H., Ahmadian, S., Dabiri, F., Nahapetian, A., Stathopoulos, T., Batalin, M., Kaiser, W., Sarrafzadeh, M., "Smart Shoe for Balance Fall Risk Assessment and Applications in Wireless Health" the 2008 Microsoft eScience Workshop, December 7-11, Indianapolis, IN.
430. F. Dabiri, A. Vahdatpour, M. Potkonjak, and M. Sarrafzadeh, "Energy Minimization for Real-Time Systems with Non-Convex and Discrete Operation Modes", DATE 2009, April 20-24, Nice, France.
431. Z. Karimi and M. Sarrafzadeh, "Power Aware Placement for FPGAs with Dual Supply Voltages", ISQED, March 16-18 2009, San Jose, CA.
432. Vahdatpour, A., Sarrafzadeh, M., "Towards Unsupervised Activity Monitoring", At the 21st International Joint Conference on Artificial Intelligence (IJCAI-09), Pasadena, CA, (July 2009)
433. Amini, N., Sarrafzadeh, M., "The design of a wireless portable device for personalized ultraviolet monitoring", Biosensing II Conference, part of the SPIE Symposium on SPIE NanoScience + Engineering, (August 2009)
434. Woodbridge, J., Nahapetian, A., Noshadi, H., Sarrafzadeh, M., Kaiser, W., "Wireless Health and the Smart Phone Conundrum", HCMDSS/MD PnP, San Francisco, CA, (April 2009)
435. Suh, M., Rofouei, M., Nahapetian, A., Sarrafzadeh, M., "Optimizing Interval Training Protocols Using Data Mining Decision Trees", Body sensor networks (BSN), Berkeley, CA, (June 2009)
436. Moazeni, M., Sarrafzadeh, M., "Accelerating Total Variation Regularization for Matrix-

- 437. Moazeni, M., Sarrafzadeh, M., "Performance Study of a Memory Optimization Technique for Software-Managed Scratchpad Memory in GPUs", IEEE Symposium on Application Specific Processors, (2009)
- 438. Lan, M., Rofouei, M., Sarrafzadeh, M., Soatto, S., "SmartLDWS: A Robust and Scalable Lane Departure Warning System for the Smartphones", 12th International IEEE Conference on Intelligent Transportation Systems (ITSC2009), St. Louis, MO , USA, (October 2009)
- 439. Dorman, K., Yahyanejad, M., Nahapetian, A., Suh, M.K., Sarrafzadeh, M., McCarthy, W., Kaiser, W., "Nutrition Monitor: A Food Purchase and Consumption Monitoring Mobile System", MobiCASE 2009, San Diego, CA USA, (October 2009)
- 440. Amini, N., Vahdatpour, A., Dabiri, F., Noshadi, H., Sarrafzadeh, M., "Joint Consideration of Energy-Efficiency and Coverage-Preservation in Microsensor Networks", Journal of Wireless Communications and Mobile Computing, (October 2009)
- 441. Macbeth, J., Sarrafzadeh, M., "Link Scheduling for Scalable Data Aggregation", The 18th International Conference on Computer Communications and Networks (ICCCN 2009), San Francisco, CA USA, (August 2009)
- 442. Macbeth, J., Sarrafzadeh, M., "Press the Cancel Button! A Performance Evaluation of Scalable In-Network Data Aggregation", 2009 International Conference on Mobile, Wireless and Optical Communication (MWOC 2009)
- 443. Suh, M.K., Lee, K., Heu, A., Nahapetian, A., Sarrafzadeh, M., "Bayesian Networks-Based Interval Training Guidance System for Cancer Rehabilitation", MobiCASE 2009, San Diego, CA, (October 2009) **Best Paper Award**
- 444. Hsiao, M., Amini, N., Sarrafzadeh, M., "A Wireless Home Automation System for Childhood Obesity Prevention", BioDevices 2010, Valencia, Spain, (January 2010)
- 445. Matthews, J., Kulkarni, R., Whitesides, G., Gerla, M., Sarrafzadeh, M., Massey, T., "A Lightweight Solution for Real-Time Dengue Detection Using Mobile Phones", International Conference on Mobile computing, Applications and Services (MobiCase 2009), San Diego, CA USA, (October 2009)
- 446. Vahdatpour, A., Sarrafzadeh, M., "Unsupervised Discovery of Abnormal Activity Occurrences in Multi-Dimensional Time Series, with Applications in Wearable Systems", 2010 SIAM International Conference on Data Mining (SDM2010), Columbus, Ohio USA, (April 2010)
- 447. Woodbridge, J., Lan, M., Pau, G., Gerla, M., Sarrafzadeh, M., "Hero: Hybrid Emergency Route-Opening Protocol", Pervasive Computing and Communications Workshops (PERCOM Workshops), 2010 8th IEEE International Conference on, Mannheim, Germany, 364-369 (March 2010)

448. Nahapetian, A., Noshadi, H., Woodbridge, J., Sarrafzadeh, M., "HIP: Health integration platform", PerHealth 2010: The First IEEE PerCom Workshop on Pervasive Healthcare, 340-345 (March 2010)
449. Macbeth, J., Sarrafzadeh, M., "Shrinking Symbolic Regression Over Medical and Physiological Signals", Signal Processing Systems (ICSPS), 2010 2nd International Conference on, Dalian, (July 2010)
450. Suh, M., Evangelista, L., Chen, V., Hong, W., Macbeth, J., Nahapetian, A., Figueras, F., Sarrafzadeh, M., "WANDA B.: Weight and activity with blood pressure monitoring system for heart failure patients", World of Wireless Mobile and Multimedia Networks (WoWMoM), 2010 IEEE International Symposium on a, Montreal, QC, Canada, (June 2010)
451. Rafouie, M., Sarrafzadeh, M., W, X., "Computing With Uncertainty in a Smart Textile Surface for Object Recognition", 2010 IEEE International Conference on Multisensor Fusion & Integration, Salt Lake City, UT USA, (September 2010)
452. Rafouie, M., Sarrafzadeh, M., Farella, E., Brunelli, D., Benini, L., "Battery-Aware Power Management Techniques for Wearable Haptic Nodes", BodyNets 2010 The Fifth International Conference on Body Area Networks, Corfu Island, Greece
453. Mortazavi, B., Hagopian, H., Woodbridge, J., Yadegar, B., Sarrafzadeh, M., "A Wireless Body-Wearable Sensor System for Designing Physically Interactive Video Games", BioAmBIS 2010, Rome, Italy.
454. Noshadi, H., Dabiri, F., Sarrafzadeh, M., Meguerdichian, S., Potkonjak, M., "Energy Optimization in Wireless Medical Systems Using Physiological Behavior", Wireless Health 2010, La Jolla, San Diego USA, (October 2010)
455. Suh, M., Evangelista, L., Chen, C., Han, K., Kang, J., Tu, M., Chen, V., Nahapetian, A., Sarrafzadeh, M., "An Automated Vital Sign Monitoring System for Congestive Heart Failure Patients", 1st ACM International Health Informatics Symposium, (November 2010)
456. Gad, P., Woodbridge, J., Lavrov, I., Gerasimenko, Y., Zhong, V., Roy, R., Sarrafzadeh, M., Edgerton, V.R., "Development of an Electronic Spinal Bridge Between the Forelimbs & Hindlimbs to Facilitate Quadrupedal Stepping After a Complete Spinal Cord Transaction", Neuroscience 2010, (November 2010)
457. Noshadi, H., Sarrafzadeh, M., Dabiri, F., "Quantification of Medical Conditions Through Irregularities in Human Locomotion", BioAmBIS 2010, (December 2010)
458. Vahdatpour, A., Amini, N., Sarrafzadeh, M., "Body Device Localization for Health and Medical Monitoring Applications", Ninth Annual IEEE International Conference on Pervasive Computing and Communications, Seattle, USA, (March 2011)
459. Bates-Jensen, B.M., MCCreath, H.E., Mehrnia, A., Sun, L., Wang, F., Lam, L., Patlan, A., Walker, M., Sarrafzadeh, M., Kaiser, W.J., "Development and Safety Testing of the

460. Xu, W., Li, Z., Hunag, M., Amini, A., Sarrafzadeh, M., "eCushion: An eTextile Device for Sitting Posture Monitoring", Body Sensor Networks 2011, Dallas, (05/23/2011)
461. Rofouei, M., Sinclair, M., Bittner, R., Blank, T., Saw, N., Herron, J., Dejean, G., "A Non-invasive Wearable Neck-cuff System for Real-time Sleep Monitoring", Body Sensor Networks 2011, Dallas, (05/23/2011)
462. Xu, W., Gong, F., He, L., Sarrafzadeh, M., "Compressed Sensing Based EEG Analysis for Fall Prevention", HCMSS/MDPnP, Chicago, USA, (04/11/2011)
463. Rofouei, M., Sarrafzadeh, M., Potkonjak, M., "Energy Efficient Collaborative Sensing-based Soft Keyboard", ISLPED-International Symposium on Low Power Electronics and Design (Eds.), Fukuoka, Japan, (08/01/2011)
464. Woodbridge, J., Bui, A., Lan, M., Sarrafzadeh, M., "Salient Segmentation of Medical Time Series Signals", 2011 IEEE International Conference on Healthcare Informatics, Imaging and Systems Biology (HISB), San Jose, CA, (07/27/2011)
465. Sarrafzadeh, M., Moazeni, M., Bui, A., "Dynamic Programming on a Data-Parallel Many-core Architecture", 2011 Symposium on Application Accelerators in High-Performance Computing (SAAHPC 2011), Knoxville, Tennessee, USA, (07/19/2011)
466. Sarrafzadeh, M., Suh, M., Woodbridge, J., Bui, A., Evangelista, L., "Missing Data Imputation for Remote CHF Patient Monitoring Systems", 33rd Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'11), Boston, MA, USA, (08/30/2011)
467. Wang, F., Mehrnia, A., Kaiser, W., Jafari, R., Lach, J., Lam, Y., Bates-Jensen, B., Sarrafzadeh, M., "A Wireless Biomedical Handheld Instrument for Evidence-Based Detection of Pressure Ulcers", Wireless Health 2011 Academic/Industry conference, San Diego, CA, (10/10/2011) **"Demo Paper"**
468. Lee, S., ling, C., Sarrafzadeh, M., "A Framework for Data Quality Estimation of On-Body Cardiac Sensor Networks", 9th Annual IEEE Consumer Communications and Networking Conference(CCNC), Las Vegas, USA, (01/14/2012)
469. Woodbridge, J., Lee, S., Nahapetian, A., Sarrafzadeh, M., "MARHS: Mobility Assessment System with Remote Healthcare Functionality for Movement Disorder Diseases", International Health Informatics Symposium (IHI 2012), Miami, USA, (01/28/2012)
470. **(Best Technical presentation Award)**. Huang, M.C., Chen, E., Xu, W., Sarrafzadeh, M., in collaboration with Dr. Belinda Lange and Mr. Chien-Yen Chang "Gaming for Upper Extremities Rehabilitation," Wireless Health 2011, San Diego, CA, October 2011. Technical demonstrations will highlight innovative solutions that represent both advances in fundamental components and complete systems serving individuals and communities.

471. Keynote speaker Sarrafzadeh, M., "End-to-End Research and Innovation in Wireless Health", Bodynets 2011, Beijing, China, November 7-8.
472. Rofouei, M., Sarrafzadeh, M., "Your Phone or Mine? Fusing Body, Touch and Device Sensing for Multi-User Device-Display Interaction", CHI in the field of Human-Computer Interaction (HCI) (2012)
473. **(Best technical demo award)** Mortazavi, B., Chung Chu, K., Li, X., Tai, J., Kotekar, S., Sarrafzadeh, M., "Near-Realistic Motion Video Games with Enforced Activity", 9th International Conference on Wearable and Implantable Body Sensor Networks (BSN 2012), London, UK, (05/10/2012)
474. **(Best paper runner-up award)** Huang, Y., Rofouei, M., Sarrafzadeh, M., "Automated Wolf Motor Function Test for Upper Extremities Rehabilitation", 9th International Conference on Wearable and Implantable Body Sensor Networks (BSN 2012), London, UK, (05/10/2012)
475. Xu, W., Zhang, M., Sawchuk, A., Sarrafzadeh, M., "Co-Recognition of Human Activity and Sensor Location via Compressed Sensing in Wearable Body Sensor Networks", 9th International Conference on Wearable and Implantable Body Sensor Networks (BSN 2012), London, UK, (05/10/2012)
476. Li, Z., Xu, W., Huang, A., Sarrafzadeh, M., "Dimensionality Reduction for Anomaly Detection in Electrocardiography: A Manifold Approach", 9th International Conference on Wearable and Implantable Body Sensor Networks (BSN 2012), London, UK, (05/10/2012)
477. 409. Fraternali, F., Rofouei, M., Alshurafa, N., Ghasemzadeh, H., Benini, L., Sarrafzadeh, M., "Opportunistic Hierarchical Classification for Power Optimization in Wearable Movement Monitoring Systems", 7th IEEE International Symposium on Industrial Embedded Systems (SIES'12), Karlsruhe, Germany, (06/20/2012)
478. Xu, W., Amini, N., Noshadi, H., Basi, S., Huang, M., Sarrafzadeh, M., "Smart Insole: A Wearable Device for Gait Analysis", Pervasive Technologies Related to Assistive Environments (PETRA) 2012, Crete Island, Greece, (06/06/2012)
479. Huang, M., Xu, W., Chang, C., Lange, B., Su, Y., Liu, J., Sarrafzadeh, M., "Smart Glove for Upper Extremities Rehabilitative Gaming Assessment", Pervasive Technologies Related to Assistive Environments (PETRA) 2012, Crete Island, Greece, (06/06/2012)
480. Lan, M., Ghasemzadeh, H., Sarrafzadeh, M., "Generalized Precursor Pattern Discovery for Biomedical Signals", 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'12), Hilton Bayfront Hotel in San Diego, California, USA, (08/28/2012)
481. Woodbridge, J., Mortazavi, B., Sarrafzadeh, M., "High Performance Time Series Indexes Using Salient Segmentation", 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'12), Hilton Bayfront Hotel in San Diego, California, USA, (08/28/2012)

482. Suh, M.K., Moin, T., Woodbridge, J., Ghasemzadeh, H., Ahmadi, S., Bui, A., Sarrafzadeh, M., "Dynamic Self-adaptive Remote Health Monitoring System for Diabetics", 34th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'12), Hilton Bayfront Hotel in San Diego, California, USA, (08/28/2012)
483. Moazeni, M., Sarrafzadeh, M., "Lock-free Hash Table on a Data-Parallel Many-Core Architecture", 2012 Symposium on Application Accelerators in High-Performance Computing (SAAHPC'12), Argonne National Laboratory, (07/10/2012)
484. B. Mapar et al "Wearable Sensor for Continuously Vigilant Spatial and Depth-Resolved Blood Perfusion Imaging," Research Demo, Wireless Health 2012, San Diego, CA.
485. Lan, M., Samy, L., Alshurafa, N., Suh, M.K., Ghasemzadeh, H., Sarrafzadeh, M., Macabasco-O'Connell, A., "WANDA: An End-to-End Remote Health Monitoring and Analytics System for Heart Failure Patients", Wireless Health 2012 (WH2012), San Diego, California, USA, (10/23/2012)
486. Zhang, M., Xu, W., Alexander Sawchuk, A., Sarrafzadeh, M., "Sparse Representation for Motion Primitive-Based Human Activity Modeling and Recognition", International Conference on Pattern Recognition (ICPR), sukuba, Japan, (November 2012)
487. Woodbridge, J., Mortazavi, B., Sarrafzadeh, S., Bui, A., "A Monte Carlo Approach to Biomedical Timeseries Search", 2012 IEEE International Conference on Bioinformatics and Biomedicine (IEEE BIBM 2012), Philadelphia, USA, (10/04/2012)
488. Suh, M.K., Moin, T., Woodbridge, J., Alshurafa, N., Lan, M., Samy, L., Ahmadi, S., Ghasemzadeh, H., Bui, A., Sarrafzadeh, M., "Dynamic Task Optimization in Remote Diabetes Monitoring Systems", 2012 IEEE Second International Conference on Healthcare Informatics, Imaging and Systems Biology (HISB), La Jolla, USA, (September 2012)
489. Woodbridge, J., Mortazavi, B., Bui, A., Sarrafzadeh, M., "Aggregated Indexing of Biomedical Time Series Data", 2012 IEEE Second International Conference on Healthcare Informatics, Imaging and Systems Biology (HISB), La Jolla, USA, (September 2012)
490. Pournaghshband, V., Reiher, P., Sarrafzadeh, M., "Securing Legacy Mobile Medical Devices", MobiHealth 2012 3rd International Conference on Wireless Mobile Communication and Healthcare, Paris, France, (11/21/2012)
491. Lee, S., Getachew, R., Kimball, J., Yew, A., Ghalehasari, N., Paak, B., Garst, J., Lu, D., Sarrafzadeh, M., "Utilization of a Novel Digital Device and an Analytic Method for Accurate Measurement of Upper Extremity Motor Function", 81st American Association of Neurological Surgeons (AANS) Annual Scientific Meeting, New Orleans, Louisiana, USA, (April 2013)
492. liu, J., Xu, W., Huang, M., Alshurafa, N., Sarrafzadeh, M., "A Dense Pressure Sensitive Bedsheet Design for Unobtrusive Sleep Posture Monitoring", IEEE Pervasive

493. Kalantarian, H., Lee, Sunghoon.,Mishra, A., Ghasemzadeh, H., Sarrafzadeh, M., "Multimodal Energy Expenditure Calculation for Health and Wellness Applications", The 5th International Workshop on Smart Environments and Ambient Intelligence (SENAmI) co-located with PerCom., San Diego, USA, (03/18/2013)
494. Lee, S., Ghasemzadeh, H., Yew, A., Getachew, R., Kimball, J., Ghalehsari, N., Paak, B., Garst, J., Razaghy, M., Lu, D., Sarrafzadeh, M., "Objective Assessment of Spastic Hand Hypertonia using a Novel Digital Device", The 20th IAGG World Congress of Gerontology and Geriatrics, Seoul, Korea, (June 2013)
495. Lee, S., Ghasemzadeh, H., Mortazavi, B., Yew, A., Getachew, R., Razaghy, M., Ghalehsari, N., Paak, B., Garst, J., Espinal, M., Kimball, J., Lu, D., Sarrafzadeh, M., "Objective Assessment of Overexcited Hand Movements using a Lightweight Sensory Device", 2013 IEEE Body Sensor Network Conference, Cambridge, Massachusetts, USA, (05/06/2013)
496. Mortazavi, B., Alsharufa, N., Lee, S., Lan, M., Chronley, M., Roberts, C., Sarrafzadeh, M., "MET Calculations from On-Body Accelerometers", 2013 IEEE Body Sensor Network Conference, Cambridge, Massachusetts, USA, (05/06/2013)
497. Liu, J., Xu, W., Ming-Chun, H., Alshurafa, N., Sarrafzadeh, M., "On-bed Monitoring for Range of Motion Exercises with a Pressure Sensitive Bedsheet", 2013 IEEE Body Sensor Network Conference, Cambridge, Massachusetts, USA, (05/06/2013)
498. Alshurafa, N., Xu, W., Liu, J., Ming-Chun, H., Mortazavi, B., Roberts, C., Sarrafzadeh, M., "Robust Human Intensity-Varying Activity Recognition using Stochastic Approximation in Wearable Sensors", 2013 IEEE Body Sensor Network Conference, Cambridge, Massachusetts, USA, (05/06/2013)
499. Moazeni, M., Sarrafzadeh, M., "High Performance Multi-dimensional Signal Search With Applications in Remote Medical Monitoring", 2013 IEEE Body Sensor Network Conference, Cambridge, Massachusetts, USA, (05/06/2013)
500. Moin, T., Sarrafzadeh, M., "Diabetes Telehealth Intervention For Transitions in Care: A Pilot Study", The Endocrine Society 95th Annual meeting and Expo, San Francisco, CA, (06/15/2013)
501. Huang, M., Xu, W., Liu, J., Samy, L., Vajid, A., Alshurafa, M., Sarrafzadeh, M., "Inconspicuous on-Bed Respiratory Rate Monitoring", The 6th International Conference on Pervasive Technologies Related to Assistive Environments, Rhodes Island, Greece, (05/29/2013)
502. Xu, W., Huang, M., Liu, J., Liu, X., Shen, X., Sarrafzadeh, M., "Microphone-based Spirometer for COPD diagnosis and Exergame Design", The 6th International Conference on Pervasive Technologies Related to Assistive Environments, Rhodes Island, Greece, (05/29/2013)
503. Huang, M., Xu, W., Liu, J., Su, Y., He, L., Sarrafzadeh, M., "Inconspicuous Computer

504. Lee, S., Ghasemzadeh, H., Mortazavi, B., Lan, M., Ong, M., Sarrafzadeh, M., "Remote Health Monitoring Systems: What Impact Can Data Analytics Have on Cost?", Wireless Health 2013, Johns Hopkins University, Baltimore, MD, (11/01/2013)
505. Ghasemzadeh, H., Evangelista, L., Sarrafzadeh, M., "Predicting Use of Remote Health Monitoring Systems in a Cohort of Patients with Chronic Heart Failure", Wireless Health 2013, Johns Hopkins University, Baltimore, MD, (11/01/2013)
506. Huang, M., Zhang, X., Xu, W., Liu, J., Sarrafzadeh, M., "EZwakeup: a sleep environment design for sleep quality improvement", ACM CHI Conference on Human Factors in Computing Systems (WIP), Toronto, Canada, (04/26/2014)
507. Alshurafa, N., Eastwood, J., Nyamathi, S., Xu, W., Liu, J. J., Pourhomayoun, M., Ghasemzadeh, H., Sarrafzadeh, M., "Battery Optimization in Smartphones for Remote Health Monitoring Systems to Enhance User Adherence", The 7th International Conference on Pervasive Technologies Related to Assistive Environments (PETRA 2014), Rhodes Island, Greece, (05/27/2014)
508. Mortazavi, B., Pourhomayoun, M., Alsheikh, G., Alshurafa, N., Lee, S., Sarrafzadeh, M., "Determining the Single Best Axis for Exercise Repetition Recognition and Counting on SmartWatches", 2014 International Conference on Wearable and Implantable Body Sensor Networks (BSN 2014), Zurich, Switzerland, (06/16/2014)
509. Alshurafa, N., Pourhomayoun, M., Nyamathi, S., Bao, L., Mortazavi, B., Eastwood, J., Sarrafzadeh, M., "Anti-Cheating: Detecting Self-Inflicted and Impersonator Cheaters for Remote Health Monitoring Systems with Wearable Sensors", 2014 International Conference on Wearable and Implantable Body Sensor Networks (BSN 2014), Zurich, Switzerland, (6/16/2014)
510. Kalantarian, H., Alshurafa, N., Sarrafzadeh, M., "A Wearable Nutrition- Monitoring System", IEEE Body Sensor Networks (BSN 2014), Zurich, Switzerland, (6/26/2014)
511. Alshurafa, N., Eastwood, J., Pourhomayoun, M., Liu, J., Sarrafzadeh, M., "Remote Health Monitoring: Predicting Outcome Success based on Contextual Features for Cardiovascular Disease", IEEE Engineering in Medicine and Biology Society (EMBC'14), Chicago, Illinois, USA, (08/26/2014)
512. Liu, J., Huang, M., Xu, W., Sarrafzadeh, M., "Bodypart Localization for Pressure Ulcer Prevention", 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'14), Chicago, Illinois, USA, (08/26/2014)
513. Sideris, C., Shahbazi, B., Pourhomayoun, M., Alshurafa, N., Sarrafzadeh, M., "Using Electronic Health records to predict severity of condition for congestive heart failure patients", The 2014 ACM International Joint Conference on Pervasive and Ubiquitous Computing (UbiComp 2014), Seattle, Washington, USA, (09/13/2014)
514. Alshurafa, N.; Eastwood, J.; Pourhomayoun, M., Liu, J. J., Nyamathi, S., Sarrafzadeh,

- M., "A Framework for Predicting Adherence in Remote Health Monitoring Systems", Wireless Health 2014, Bethesda, MD, USA, (10/29/2014)
515. Eastwood, J., Moser, D., Watson, K., Sarrafzadeh, M., "Intervention Strategies to Staying Connected: a CVD Risk Intervention for Young Black Women", Intervention Strategies to Reduce CV Risk or Promote Heart Health- AHA Scientific Sessions 2014, Chicago, Illinois, (11/18/2014)
 516. Alshurafa, N., Kalantarian, H., Pourhomayoun, M., Sarin, S., Liu, J., Sarrafzadeh, M., "Non-Invasive Monitoring of Eating Behavior Using Spectrogram Analysis in a Wearable Necklace", 2014 Healthcare Innovations and Point-of-Care Technologies Conference(HICPT'14), Seattle, WA, USA, (10/08/2014)
 517. Kalantarian, H., Alshurafa, N., Pourhomayoun, M., Sarin, S., Sarrafzadeh, M., "Spectrogram-Based Audio Classification of Nutrition Intake", 2014 Healthcare Innovations and Point-of-Care Technologies Conference(HICPT'14), Seattle, WA, USA, (10/08/2014)
 518. Pourhomayoun, M., Alshurafa, N., Mortazavi, B., Ghasemzadeh, H., Sideris, K., Sadeghi, B., Ong, M., Evangelista, L., Romano, P., Auerbach, A., Kimchi, A., Sarrafzadeh, M., "Multiple Model Analytics for Adverse Event Prediction in Remote Health Monitoring Systems", 2014 Healthcare Innovations and Point-of-Care Technologies Conference(HICPT'14), Seattle, WA, USA, (10/08/2014)
 519. Mortazavi, B., Pourhomayoun, M., Alshurafa, N., Chronley, M., Lee, S., Roberts, C., Sarrafzadeh, M., "Support Vector Regression for METs of Exergaming Actions", 2014 Healthcare Innovations and Point-of-Care Technologies Conference(HICPT'14), Seattle, WA, USA, (10/08/2014)
 520. **(Best Paper Award)** Pournaghshband, V., Meyer, D., Holyland, M., Sarrafzadeh, M., Reiher, P., "Adrasteia: A Smartphone App for Securing Legacy Mobile Medical Devices", WUMS 2014: IEEE Workshop on Usable Mobile Security, Chengdu, China, (12/19/2014)
 521. Mortazavi, B., Pourhomayoun, M., Nyamathi, S., Wu, B., Lee, S., Sarrafzadeh, M., "Multiple Model Recognition for Near-Realistic Exergaming", IEEE Pervasive computing and communications (PerCom) 2015, St. Louis Missouri, USA, (03/23/2015)
 522. Kalantarian, H., Alshurafa, N., Le, T., Sarrafzadeh, M., "Non-Invasive Detection of Medication Adherence using a Digital Smart Necklace", SmartE, The 2nd IEEE PerCom Workshop on Smart Environments: Closing the Loop, St. Louis, Missouri, USA, (03/25/2015)
 523. Kalantarian, H., Alshurafa, N., Pourhomayoun, M., Sarrafzadeh, M., "Power Optimization for Wearable Devices", IEEE International Conference of Pervasive Computing and Communications (PerCom 2015), St. Louis, Missouri, USA, (03/23/2015)
 524. Kalantarian, H., Alshurafa, N., Sarrafzadeh, M., "A Smartwatch-Based Medication Adherence System", The 12th International Conference on Wearable and Implantable

525. Kalantarian, H., Sarrafzadeh, M., "A Smartwatch-Based System for Audio-Based Monitoring of Dietary Habits", The Fifth International Conference on Ambient Computing, Applications, Services and Technologies-AMBIENT 2015, Nice, France, (07/19/2015)
526. Pourhomayoun, M., Nemati, E., Mortazavi, B., Sarrafzadeh, M., "Context-Aware Data Analytics for Activity Recognition", The Fifth International Conference on Ambient Computing, Applications, Services and Technologies-AMBIENT 2015, Nice, France, (07/19/2015)
527. Samy, L., Macey, P., Alshurafa, N., Sarrafzadeh, M., "An Automated Framework For Predicting Obstructive Sleep Apnea Using A Brief, Daytime, Non-Intrusive Test Procedure", The 8th International Conference on Pervasive Technologies Related to Assistive Environments (PETRA2015), Corfu, Greece, (07/01/2015)
528. Samy, L., Macey, P., Sarrafzadeh, M., "A Gender-Aware Framework for the Daytime Detection of Obstructive Sleep Apnea", 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'15), Milano, Italy, (08/25/2015)
529. Sideris, K., Alshurafa, N., Pourhomayoun, M., Shahmohammadi, F., Sarrafzadeh, M., "A data-driven feature extraction framework for predicting the severity of condition for Congestive Heart Failure Patients", 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'15), Milano, Italy, (08/25/2015)
530. Sideris, K., Alshurafa, N., Kalantarian, H., Sarrafzadeh, M., Eastwood, J., "Effects of Coaching on Adherence in Remote Health Monitoring Systems", Wireless Health 2015, Bethesda, MD, (10/14/2015)
531. Day, F., Sarrafzadeh, M., Smith, S., Pourhomayoun, M., Sideris, K., Param, A., Ben-Hamou, J., Keeves, D., Pfeffer, M., Bell, D., "An EHR-Integrated Shared Decision Making Mobile App for Prostate Cancer Screening", American Medical Informatics Association (AMIA) 2015, San Francisco, CA, (11/14/2015)
532. Pourhomayoun, M., Nemati, E., Mortazavi, B., Sarrafzadeh, M., "Context - Aware Data Analytics for Activity Recognition", DATA ANALYTICS 2015, The Fourth International Conference on Data Analytics, Nice, France, (07/19/2015) **(Best Paper Award)**.
533. Sideris, C., Kalantarian, H., Nemati, E., Sarrafzadeh, M., "Building Continuous Arterial Blood Pressure Prediction Models Using Deep Recurrent Networks", The 2nd IEEE International Conference on Smart Computing (SMARTCOMP 2016), St. Louis, Missouri, (05/18/2016)
534. Suh, Y., Nemati, E., Sarrafzadeh, M., "Kalman-Filter-Based Walking Distance Estimation for a Smart-Watch", 2016 the IEEE 1st International Conference on Connected Health: Applications, Systems and Engineering Technologies (CHASE 2016), Washington, DC, USA, (06/27/2016)

535. Sideris, C., Shaikh, S., Kalantarian, H., Sarrafzadeh, M., "A Big-Data Platform for Medical Knowledge Extraction from Electronic Health Records: Automatic Assignment of ICD-9 Codes", 9th International conference on The PErvasive Technologies Related to Assistive Environments (PETRA)2016, Corfu Island, Greece, (06/29/2016)
536. Kalantarian*, H., Sideris, C., Le, T., Sarrafzadeh, M., "A Framework for Probabilistic Segmentation of Continuous Sensor Signals", 13th International Conference on Wearable and Implantable Body Sensor Networks, UCSF Mission Bay Conference Center, San Francisco, CA, (06/14/2016)
537. Hosseini, A., Buonocore, C., Hashemzadeh, S., Hojaiji, H., Kalantarian, H., Sideris, C., Bui, A., King*, C., Sarrafzadeh, M., "HIPAA Compliant Wireless Sensing Smartwatch Application for the Self-Management of Pediatric Asthma", 13th International Conference on Wearable and Implantable Body Sensor Networks, UCSF Mission Bay Conference Center, San Francisco, CA, (06/14/2016)
538. Moatamed*, B., Arjun, A., Shahmohammadi, F., Ramezani, R., Naeim, A., Sarrafzadeh, M., "Low-cost Indoor Health Monitoring System", 13th International Conference on Wearable and Implantable Body Sensor Networks, UCSF Mission Bay Conference Center, San Francisco, CA, (06/14/2016)
539. Nemati*, E., Suh, Y., Sarrafzadeh, M., "Gait Velocity Estimation for a Smartwatch Platform Using Kalman Filter Peak Recovery", 13th International Conference on Wearable and Implantable Body Sensor Networks, UCSF Mission Bay Conference Center, San Francisco, CA, (06/14/2016)
540. Nemati*, E., Sideris, C., Kalantarian, H., Sarrafzadeh, M., "A Dynamic Data Source Selection System for Smartwatch Platform", 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Disney's Contemporary Resort, Orlando, FL, (08/16/2016)
541. Hosseini*, A., Kalantarian, H., Sarrafzadeh, M., "Adaptive Data Processing for Real-Time Nutrition Monitoring", 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Disney's Contemporary Resort, Orlando, FL, (08/16/2016)
542. Kalantarian*, H., Sideris, C., Le, T., Sarrafzadeh, M., "Computation Offloading for Real-Time Health-Monitoring Devices", 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, Disney's Contemporary Resort, Orlando, FL, (08/16/2016)
543. Ong, M., Romano, P., Edgington, S., Aronow, H., Auerbach, A., Black, J., De Marco, T., Escarce, J., Evangelista, L., Hanna, B., Ganiats, T., Greenberg, B., Greenfield, S., Kaplan, S., Kimchi, A., Liu, H., Lombardo, D., Mangione, C., Sadeghi, B., Sarrafzadeh, M., Tong, K., Fonarow, G., "Remote Patient Monitoring after Discharge of Hospitalized Heart Failure Patients: The Better Effectiveness after Transition - Heart Failure (BEAT-HF) Randomized Controlled Trial", 2016 Annual AcademyHealth Research Meeting, Boston, USA, (06/26/2016) (**Best Abstract Award**)

544. Kalantarian, H., Alshurafa, N., Sarrafzadeh, M., "An Iterative Dimensionality-Scaling System for Real-Time Health Monitoring Applications", IEEE International Conference on Healthcare Informatics 2016 (ICHI 2016), Chicago, Illinois, USA, (10/04/2016)
545. Pourhomayoun, M., Alshurafa, N., Dabiri, F., Yadav, K., Sideris, C., Tseng, L., Ghasemzadeh, H., Nyamathi, A., Sarrafzadeh, M., "A Robust Distributed Remote Health Monitoring System for Rural Area with Limited Internet Access", 11th International Conference on Body Area Networks, Turin, Italy, (12/15/2016)
546. Pourhomayoun, M., Alshurafa, N., Ardestani, E., Samiee, A., Sarrafzadeh, M., "Why Do We Need a Remote Health Monitoring System? A Case Study for Congestive Heart Failure Patients", 11th International Conference on Body Area Networks, Turin, Italy, (12/15/2016)
547. Habre, R., King, C., Rocchio R., Eckel, S., Sarrafzadeh, M., Gilliland, F., Bui, A., "The Los Angeles Pediatric Research Using Integrated Sensor Monitoring Systems Center: Biomedical REAL-Time Health Evaluation", IT/Sensor Fair, International Society of Exposure Science, Utrecht, Netherlands, (10/09/2016)
548. Hojaiji, H., Kalantarian, H., Bui, A., King, C., Sarrafzadeh, M., "Temperature and Humidity Calibration of a Low-Cost Wireless Dust Sensor for Real-Time Monitoring", 2017 IEEE Sensors Applications Symposium (SAS), Glassboro, New Jersey, USA, (03/13/2017)
549. Buonocore, C., Rocchio, R., Roman, A., King, C., Sarrafzadeh, M., "Wireless Sensor-Dependent Ecological Momentary Assessment for Pediatric Asthma mHealth Applications", IEEE 2nd International Conference on Connected Health: Applications, Systems and Engineering Technologies, Philadelphia, USA, (07/17/2017)
550. Hojaiji, H., Goldstein, O., King, C., Sarrafzadeh, M., Jerrett, M., "Design and Calibration of a Wearable and Wireless Research Grade Air Quality Monitoring System for Real-Time Data Collection", IEEE Global Humanitarian Technology Conference (GHTC), San Jose, CA, USA, (10/19/2017)
551. F. Shahmohammadi, A. Hosseini, **C.E. King**, M. Sarrafzadeh. Smartwatch based activity recognition using active learning. *In Proc. of the 2017 IEEE/ACM Conference on Connected Health: Applications, Systems and Engineering Technologies*, (in press), 2017
552. Babak Moatamed, Sajad Darabi, Migyeong Gwak, Mohammad Kachuee, Casey Metoyer, Mike Linn, Majid Sarrafzadeh, "Sport Analytics Platform for Athletic Readiness Assessment", IEEE-NIH 2017 Special Topics Conference on Healthcare Innovations and Point-of-Care Technologies, HI-POCT 2017
553. M. Kachuee, A. Hosseini, B. Moatamed, S. Darabi, M. Sarrafzadeh, Context-Aware Feature Query to Improve the Prediction Performance, IEEE GlobalSIP Symposium on Big Data Analytics for IoT Healthcare (GlobalSIP), 2017.
554. Sajad Darabi, Babak Moatamed, Wenhao Huang, Migyeong Gwak, Casey Metoyer, Mike Linn, Majid Sarrafzadeh "Heart Rate Compression and Time Reduction Method

for HRV Monitoring in Athletes", IEEE-NIH 2017 Special Topics Conference on Healthcare Innovations and Point-of-Care Technologies, Maryland, USA