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Address:

56 Creekside Park Drive
Johns Creek, GA 30022

Employment:

- 1989-present: Full Professor of Cybersecurity & Privacy, and Electrical & Computer Engineering (**Georgia Tech, Atlanta, GA 30332**).

Areas of Technical Interest – Enterprise Software, Cloud Computing Embedded Systems, Wireless & Mobile Communications, Computer Engineering, Circuit Design (Analog/Digital), Biomedical Instrumentation Hardware/Software, Software Engineering, Digital Signal Processing, Sensors, Wireline & Wireless Computer Networks, Software Systems, Control Systems, Chip Design, Cloud Computing.

Education: PhD (EECS, University of California at Berkeley, 1989), **B.Tech** (Hons) in Electronics and Electrical Communications Engineering (Indian Institute of Technology, Kharagpur, 1984).

Startup Companies:

Director, **VP Technologies, Inc.** (1995-): A startup commercialized through Georgia Tech's Advanced Technology Development Corporation (ATDC) focusing on digital software and hardware design services for military market. <http://www.vptinc.net>

Director, **Soft Networks, LLC** (2001-2007): A startup commercialized through Georgia Tech support focusing on software development tools and compilers for Cellular/WiFi/VOIP/telecommunication products. <http://www.soft-networks.com>

Director, **Elastic Video Inc.** (2007- 2009): A startup commercialized through Georgia Tech's VentureLab (<http://venturelab.gatech.edu>) development image and video processing software for wireless & IP networking.

Litigation Experience (2015-2021) With Testimony

(Note: There may be multiple cases between the parties, e.g., District Court v. ITC, US versus Foreign Cases)

Chrimar v. Adtran, Alcatel, et al.

Technology: Power over Ethernet (2015-2017)

Submitted reports & Deposition & Trial

Chamberlain v. Ryobi/TTI

Case No: 1:16-cv-06097 (ND Illinois)

Expert for Ryobi

Technology: Wireless/IoT/Barrier Movement (2016 – 2019)

Submitted reports & deposition & trial testimony

IOEngine v. IMC/Imation

Case No: cv-14-1572-GMS (US Delaware)

Expert for IMC/Imation

Technology: Networked Storage Device (2016-2017)

Submitted reports & deposition & trial testimony

Huawei v. Samsung

Case No: 3:16-cv-2787-WHO (ND Cal)

Expert for Samsung

Technology: 4G/LTE Random Access Protocols (2016-2019)

Submitted reports & deposition

Hitachi Maxell v. ZTE/Huawei

Case No: 5:16-cv-00178-RWS (ED Texas)

Expert for Hitachi Maxell

Technology: Digital Cameras

Submitted reports & deposition (2017 – 2018)

Hitachi Maxell v. Apple

Case No: 5:19-cv-00036-RWS

Expert for Hitachi Maxell

Technology: Digital Cameras

Submitted Expert Reports (2020-)

Qualcomm v. Apple

Case No: 17-ccv-0108-GPC-MDD (SD Cal) Also, Related ITC/FTC Matters

Expert for Qualcomm

Technology: 4G/Wireless Communications/Smartphones (2017-2019)

Submitted Reports and Deposition

Qualcomm v. Apple

Case No: 3:17-cv-01375-DMS-MDD (SD Cal)

Expert for Qualcomm

Technology: 4G/Wireless Communications/Smartphones (2017-2019)

Submitted Reports and Deposition

Optis v. Huawei

Case No: 2:17-cv-123 (E.D. Texas)

Expert for Optis Wireless

Technology: 4G/Video (2017-2019)

Submitted reports & deposition

Beckman Coulter v. Sysmex

Case No: 1:17-cv-24049-DPG (ND Illinois)

Expert for Sysmex

Technology: Medical Instrumentation Automation (2017-present)

Testifying Expert

TQ Delta v. Xyxel/Adtran

Expert for TQ Delta

Technology: DSL Technologies (2018-present)

Testifying Expert

3GL/KPN v. LG, Blackberry, HTC

Expert for 3GL/KPN

Technology: 4G/LTE Protocols (2018-present)

Reports and Deposition / Testifying Expert

Rovi v. Comcast

ITC No. 337-TA-1103 (ITC)

Expert for Rovi

Technology: Digital Video & interactive GUI (Jan 2018-May 2018)

Reports and Deposition

Cirba/Densify v. VMWare

Case No: 1:19-cv-00742-LPS

Expert for Cirba/Densify

Technology: Virtualization (2019-present)

Reports Deposition/PI Hearing / Testifying Expert

Power Integrations v. On Semiconductor

Case No: 17-cv-03189-BLF

Expert for On Semiconductor

Technology: Power Electronics (2018-2019)

Reports & Deposition/Testifying Expert.

Pathway v. Lumens, IPEVO, Aver JDA

Case No: ITC 337-TA-1045

Expert for Lumens JDA

Technology: Document Cameras (2016-2019)

Reports & Deposition (for IPR/ITC, no trial)

Wilan v. Apple

Case No: 3:14-cv-2235

Expert for WiLan

Technology: Voice over LTE/LTE Protocols (2017-2020)

Reports and Testified through Deposition/Trials

St. Lawrence Comm. v. Amazon

Case No. 2:19-CV-00027-JRG

Expert for Amazon

Technology: Multimedia Codecs

Submitted Expert Reports/Deposition (2020-2020)

PanOptis v. Apple

Case No. 2:19-CV-00066-JRG

Expert for PanOptis

Technology: LTE

Submitted Expert Reports/Deposition/Trial (2019-2020)

GAS v. Sprint Communications

Case No. 2:20-cv-00007-RWS

Expert for General Access (GAS)

Technology: LTE

Submitted Expert Reports/Deposition (9/21-)

Causum v. Ecobee, Itron, et al

Case No. ITC 337-TA-1277

Expert for Causum

Technology: Load Management

Submitted Expert Reports and Deposition (6/22)

Additional matters include declarations supporting IPRs at the PTAB for Google (US Patent 8,601,154), On Semiconductor (US Patent 6,212,079), Ubisoft (US Patent 5,490,216), Lumens JDA (2017-2019), Broadcom (WiFi), Sony (US Patent 6,101,534), Kia, (US Patent 5,530,431), Qualcomm, Ericsson, Daimler Benz,

VW, Estech, Amazon, Ring, Digital Ally, On Semiconductor, United Patents, Lenovo, BMC Software, BMW, Daimler and Dolby.

Earned Degrees

- 1. B. Tech (Hons), Electronics & Electrical Comm. Engineering**
Indian Institute of Technology (IIT), Kharagpur, India
1984.
- 2. Ph.D., Electrical Engineering & Computer Sciences (EECS)**
University of California (UC), Berkeley. CA
1989.

Books

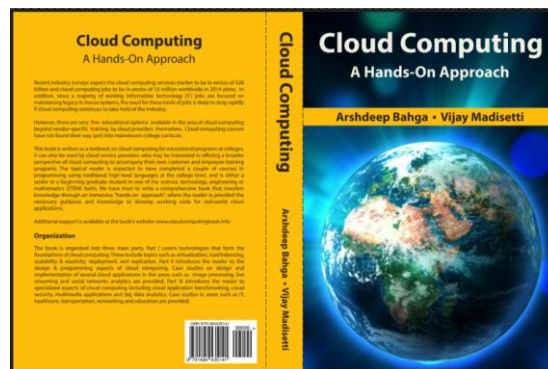
- 1. VLSI Digital Signal Processors**
Madiseti, V.K.;
Boston: MA, IEEE Press: Butterworth Heinemann, 1995, 525 pp.
- 2. Quick-Turnaround ASIC Design in VHDL**
Romdhane, M., Madiseti, V.K., Hines, J.
Boston: MA, Kluwer Academic Press, 1996, 190 pp.
- 3. The Digital Signal Processing Handbook (First Edition)**
Madiseti, V. K., Williams, D. (Editors)
CRC Press, Boca Raton, Fla, 1998, 2500 pp.
- 4. VHDL: Electronics Systems Design Methodologies.**
Madiseti, V. K. (Editor)
Boston: MA, IEEE Standards Press, 2000, ISBN 0-7381-1878-8.
- 5. Platform-Centric Approach to System-on-Chip (SoC) Design.**
Madiseti, V. K., Arpnikanondt, A.
Springer, Boston: MA, Springer, 2004, 280 pp.
- 6. The Digital Signal Processing Handbook – Second Edition.**
Madiseti, V. K. (2009)
CRC Press, Boca Raton, Fla.
- 7. Cloud Computing: A Hands-On Approach**
A Bahga, V. Madiseti (2013)

Amazon CreateSpace Publishing, 2013, 454 pp.

8. Internet of Things: A Hands-On Approach

A Bahga, V. Madiseti (2014)

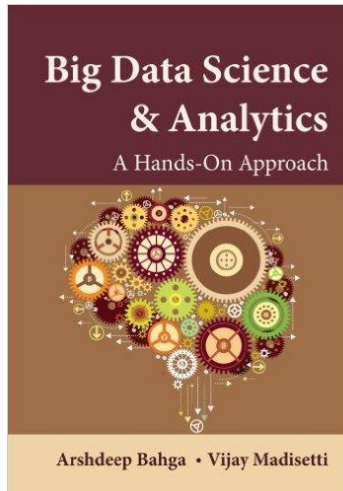
Amazon CreateSpace Publishing, 2014, 450 pp.



9. Big Data Science & Analytics: A Hands-On Approach

A Bahga, V. Madiseti (2016)

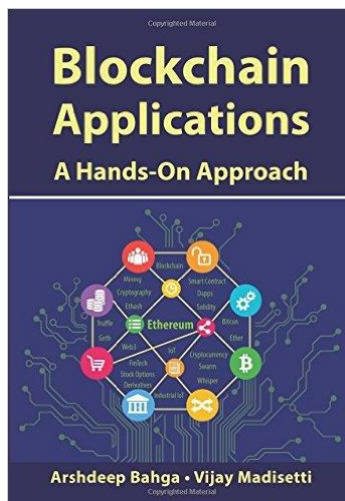
Amazon CreateSpace Publishing, 2016, 542 pp.



10. Blockchain Applications: A Hands-On Approach

A Bahga, V. Madiseti (2017)

Amazon CreateSpace Publishing, 2017, 380 pp.



Edited Books & Collection of Papers

1. Advances in Parallel & Distributed Simulation

Madiseti, V.K.; Nicol, D., Fujimoto, R. (Editors)

San Diego, CA: SCS Press, 1991, 200 pp.

2. Modeling, Analysis, Simulation of Computer & Telecommunications Systems

Madiseti, V., Gelenbe, E., Walrand, J. W. (Editors)

Los Alamitos: CA, IEEE Computer Society Press, 1994, 425 pp.

3. Modeling & Simulations on Microcomputers

Madisetti, V.K. (Editor)

San Diego, CA: SCS Press, 138 pp. 1990.

Editorship of Journals & Transactions

1. IEEE Design & Test of Computers

Special Issue: Reengineering Digital Systems

April – June 1999 (Vol 16, No 2)

Madisetti, V.K (Editor)

Los Alamitos: CA, IEEE Computer Society Press, 1999.

2. IEEE Design & Test of Computers

Special Issue: Rapid Prototyping of Digital Systems

Fall 1996 (Vol 13, No 3)

Madisetti, V., Richards, M. (Editors)

Los Alamitos: CA, IEEE Computer Society Press, 1994, 425 pp.

3. IEEE Transactions on Circuits & Systems II

Associate Editor: 1993-1995.

4. International Journal in Computer Simulation

Associate Editor: 1990-1993

5. International Journal in VLSI Signal Processing

Editorial Board: 1995 - Present

Recent Issued US Patents

- [1] [10,503,927](#) [Method and system for securing cloud storage and databases from insider threats and optimizing performance](#), Issued Dec 10, 2019
- [2]. [10,460,283](#) [Smart contract optimization for multiparty service or product ordering system](#), Issued Oct 29, 2019
- [3]. [10,459,946](#) [Method and system for tuning blockchain scalability, decentralization, and security for fast and low-cost payment and transaction processing](#), Issued Oct 29, 2019

- [4]. [10,402,589](#) [Method and system for securing cloud storage and databases from insider threats and optimizing performance](#), Issued Sep 3, 2019
- [5]. [10,394,845](#) [Method and system for tuning blockchain scalability for fast and low-cost payment and transaction processing](#), Issued Aug 27, 2019
- [6]. [10,289,631](#) [Method and system for tuning blockchain scalability for fast and low-cost payment and transaction processing](#), Issued May 24, 2019
- [7]. [10,255,342](#) [Method and system for tuning blockchain scalability, decentralization, and security for fast and low-cost payment and transaction processing](#), Issued April 9, 2019
- [8]. [10,243,743](#) [Tokens or crypto currency using smart contracts and blockchains](#), Issued March 26, 2019
- [9]. [10,204,339](#) [Method and system for blockchain-based combined identity, ownership, integrity and custody management](#), Issued February 12, 2019
- [10]. [10,204,148](#) [Method and system for tuning blockchain scalability, decentralization, and security for fast and low-cost payment and transaction processing](#), Issued Feb 12, 2019
- [11]. [10,121,143](#) [Method and system for blockchain-based combined identity, ownership, integrity and custody management](#), Issued Nov 6, 2018
- [12]. [10,102,526](#) [Method and system for blockchain-based combined identity, ownership, integrity and custody management](#), October 16, 2018
- [13]. [10,102,265](#) [Method and system for tuning blockchain scalability for fast and low-cost payment and transaction processing](#), October 16, 2018
- [14]. [9,935,772](#) [Methods and systems for operating secure digital management aware applications](#), April 3, 2018
- [15]. [9,769,213](#) [Method and system for secure digital object management](#), Issued Sep 19, 2017

Refereed Journal Publications

1. Trends in the Electronic Control of Mine Hoists

*Madiseti, V. and Ramlu, M.,
IEEE Transactions on Industry Applications, Vol IA-22, No. 6,
November/December 1986. Pages 1105-1112*

2. Multilevel range/NEXT performance in digital subscriber loops

Brand, G.; Madiseti, V.; Messerschmitt, D.G.;
Communications, Speech and Vision, IEE Proceedings I [see also IEE

Proceedings-Communications] ,Volume: 136 , Issue: 2 , April 1989
Pages:169 – 174

3. Seismic migration algorithms on parallel computers

Madisetti, V.K.; Messerschmitt, D.G.;
Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and
Signal Processing, IEEE Transactions on] ,Volume: 39 , Issue: 7 , July 1991
Pages:1642 – 1654

4. Asynchronous algorithms for the parallel simulation of event-driven dynamical systems

Madisetti, V.K.; Walrand, J.C.; Messerschmitt, D.G.:
ACM Transactions on Modeling and Computer Simulation, v 1, n 3, July 1991,
Pages: 244-74

5. Synchronization mechanisms for distributed event-driven computation

Madisetti, V.K.; Hardaker, D.:
ACM Transactions on Modeling and Computer Simulation, v 2, n 1, Jan. 1992,
Pages: 12-51

6. Efficient VLSI Architectures for the Arithmetic Fourier Transform (AFT)

Kelley, B.T.; Madisetti, V.K.;
Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and
Signal Processing, IEEE Transactions on] ,Volume: 41 , Issue: 1 , January
1993
Pages:365-378

7. The fast discrete Radon transform. I. Theory

Kelley, B.T.; Madisetti, V.K.;
Image Processing, IEEE Transactions on ,Volume: 2 , Issue: 3 , July 1993
Pages:382 – 400

8. The Georgia Tech digital signal multiprocessor

Barnwell, T.P., III; Madisetti, V.K.; McGrath, S.J.A.;
Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and
Signal Processing, IEEE Transactions on] ,Volume: 41 , Issue: 7 , July 1993
Pages:2471 – 2487

9. The MIMDIX Environment for Parallel Simulation

Madisetti, V.K.; Hardaker, D.; Fujimoto, R.M.:
Journal of Parallel and Distributed Computing, v18, no. 4, August 1993,
Pages: 473-83.

- 10. LMSGEN: a prototyping environment for programmable adaptive digital filters in VLSI**
Romdhane, M.S.B.; Madiseti, V.K.;
Chapter in VLSI Signal Processing, VII, 1994.,
Pages:33 – 42
- 11. Fixed-point co-design in DSP**
Egolf, T.W.; Famorzadeh, S.; Madiseti, V.K.;
Chapter in VLSI Signal Processing, VII, 1994.,
Pages:113 - 126
- 12. A fast spotlight-mode synthetic aperture radar imaging system**
Madiseti, V.K.;
Communications, IEEE Transactions on ,Volume: 42 , Issue: 234 , February-April 1994
Pages:873 – 876
- 13. Rapid prototyping on the Georgia Tech digital signal multiprocessor**
Curtis, B.A.; Madiseti, V.K.;
Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on] ,Volume: 42 , Issue: 3 , March 1994
Pages:649 – 662
- 14. Low-power signaling in asymmetric noisy channels via spectral shaping**
Sipitca, M.; Madiseti, V.K.;
Signal Processing Letters, IEEE, Volume: 1 , Issue: 8 , Aug 1994
Pages:117 – 118
- 15. A quantitative methodology for rapid prototyping and high-level synthesis of signal processing algorithms**
Madiseti, V.K.; Curtis, B.A.;
Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and Signal Processing, IEEE Transactions on] ,Volume: 42 , Issue: 11 , Nov. 1994
Pages:3188 – 3208
- 16. Computer Simulation of Application-Specific Signal Processing Systems**
Casinovi, G.; Madiseti, V.K.;
International Journal in Computer Simulation, Vol. 4, No. 4, Nov 1994.
- 17. System partitioning of MCMs for low power**
Khan, S.A.; Madiseti, V.K.;
Design & Test of Computers, IEEE ,Volume: 12 , Issue: 1 , Spring 1995
Pages:41 – 52

18. Error correcting run-length limited codes for magnetic recording

Jaejin Lee; Madiseti, V.K.;

Magnetics, IEEE Transactions on ,Volume: 31 , Issue: 6 , Nov. 1995

Pages:3084 – 3086

19. Virtual prototyping of embedded microcontroller-based DSP systems

Madiseti, V.K.; Egolf, T.W.;

Micro, IEEE ,Volume: 15 , Issue: 5 , Oct. 1995

Pages:9 – 21

20. Constrained multitrack RLL codes for the storage channel

Lee, J.; Madiseti, V.K.;

Magnetics, IEEE Transactions on ,Volume: 31 , Issue: 3 , May 1995

Pages:2355 – 2364

21. Rapid digital system prototyping: current practice, future challenges

Madiseti, V.K.;

Design & Test of Computers, IEEE ,Volume: 13 , Issue: 3 , Fall 1996

Pages:12 – 22

22. Conceptual prototyping of scalable embedded DSP systems

Dung, L.-R.; Madiseti, V.K.;

Design & Test of Computers, IEEE ,Volume: 13 , Issue: 3 , Fall 1996

Pages:54 – 65

23. Advances in rapid prototyping of digital systems

Madiseti, V.K.; Richards, M.A.;

Design & Test of Computers, IEEE ,Volume: 13 , Issue: 3 , Fall 1996

Pages:9

24. Combined modulation and error correction codes for storage channels

Jaejin Lee; Madiseti, V.K.;

Magnetics, IEEE Transactions on ,Volume: 32 , Issue: 2 , March 1996

Pages:509 – 514

25. Model-based architectural design and verification of scalable embedded DSP systems-a RASSP approach

Dung, L.-R.; Madiseti, V.K.; Hines, J.W.;

Chapter in VLSI Signal Processing, IX, 1996.

Pages:147 – 156

26. Low-power digital filter implementations using ternary coefficients

Hezar, R.; Madiseti, V.K.;

Chapter in VLSI Signal Processing, IX, 1996.,

Pages:179 – 188

27. All-digital oversampled front-end sensors

Romdhane, M.S.B.; Madiseti, V.K.;

Signal Processing Letters, IEEE, Volume: 3 , Issue: 2 , Feb. 1996

Pages:38 – 39

28. Modeling COTS components in VHDL

Calhoun, S., Reese, R; Egolf, T., Madiseti, V.K.;

Journal of VLSI Signal Processing, Volume: 14 , Issue: 2 , Nov 1996

Pages: 24 – 31

29. VHDL-Based Rapid Systems Prototyping

Egolf, T.; Madiseti, V.K.;

Journal of VLSI Signal Processing, Volume: 14 , Issue: 2 , Nov 1996

Pages: 40-52

30. Interface design for core-based systems

Madiseti, V.K.; Lan Shen;

Design & Test of Computers, IEEE ,Volume: 14 , Issue: 4 , Oct.-Dec. 1997

Pages:42 - 51

31. Incorporating cost modeling in embedded-system design

Debardelaben, J.A.; Madiseti, V.K.; Gadiant, A.J.;

Design & Test of Computers, IEEE ,Volume: 14 , Issue: 3 , July-Sept. 1997

Pages:24 – 35

32. On homomorphic deconvolution of bandpass signals

Marenco, A.L.; Madiseti, V.K.;

Signal Processing, IEEE Transactions on [see also Acoustics, Speech, and

Signal Processing, IEEE Transactions on] ,Volume: 45 , Issue: 10 , Oct. 1997

Pages:2499 – 2514

**33. A case study in the development of multi-media educational material:
the VHDL interactive tutorial**

Gadiant, A.J.; Stinson, J.A., Jr.; Taylor, T.C.; Aylor, J.H.; Klenke, R.H.;

Salinas, M.H.; Madiseti, V.K.; Egolf, T.; Famorzadeh, S.; Karns, L.N.; Carter,

H.W.;

Education, IEEE Transactions on ,Volume: 40 , Issue: 4 , Nov. 1997

Pages:17 pp.

34. Adaptive mobility management in wireless networks

Jeongwook Kim; Madiseti, V.K.;

Electronics Letters ,Volume: 34 , Issue: 15 , 23 July 1998

Pages:1453 – 1455

35. Efficient implementation of two-band PR-QMF filterbanks

Hezar, R.; Madiseti, V.K.;

Signal Processing Letters, IEEE ,Volume: 5 , Issue: 4 , April 1998

Pages:92 – 94

36. On fast algorithms for computing the inverse modified discrete cosine transform

Yun-Hui Fan; Madiseti, V.K.; Mersereau, R.M.;

Signal Processing Letters, IEEE ,Volume: 6 , Issue: 3 , March 1999

Pages:61 – 64

37. System on chip or system on package?

Tummala, R.R.; Madiseti, V.K.;

Design & Test of Computers, IEEE ,Volume: 16 , Issue: 2 , April-June 1999

Pages:48 – 56

38. Reengineering legacy embedded systems

Madiseti, V.K.; Jung, Y.-K.; Khan, M.H.; Kim, J.; Finnessy, T.;

Design & Test of Computers, IEEE ,Volume: 16 , Issue: 2 , April-June 1999

Pages:38 – 47

39. Reengineering digital systems

Madiseti, V.K.;

Design & Test of Computers, IEEE ,Volume: 16 , Issue: 2 , April-June 1999

Pages:15 – 16

40. Parameter optimization of robust low-bit-rate video coders

Sangyoun Lee; Madiseti, V.K.;

Circuits and Systems for Video Technology, IEEE Transactions on, Volume: 9
Issue: 6 , Sept. 1999

Pages:849 – 855

41. Closed-form for infinite sum in bandlimited CDMA

Jatunov, L.A.; Madiseti, V.K.;

Communications Letters, IEEE ,Volume: 8 , Issue: 3 , March 2004

Pages:138 – 140

42. A new protocol to enhance path reliability and load balancing in mobile ad hoc networks

Argyriou, A.; Madiseti, V.K.;

Journal of Ad Hoc Networks, Elsevier Press, 2004

43. Closed-form analysis of CDMA systems using Nyquist pulse

Jatunov, L.A.; Madiseti, V. K.;

Communications Letters, IEEE (Under Revision), 2005.

44. Systematic Design of End-to-End Wireless Mobility Management Protocols,

Argyriou, A.; Madiseti, V. K.;

ACM/Springer Wireless Networks (WINET), Accepted 2005.

45. A Novel End-to-End Approach for Video Streaming Over the Internet,

Argyriou, A.; Madiseti, V. K.;

Kluwer Telecommunications Systems, Vol. 28, No. 2, Pages 133-150, Jan 2005. *Special Issue on Multimedia Streaming.*

46. An Analytical Framework of RD Optimized Video Streaming with TCP,

Argyriou, A.; Madiseti, V. K.;

IEEE Transactions on Multimedia, Submitted for review in March 2005.

47. Modeling the Effect of Handoffs on Transport Protocol Performance,

Argyriou, A.; Madiseti, V. K.;

IEEE Transactions on Mobile Computing, Submitted for review in March 2005

48. Throughput Models for Transport Protocols with CBR and VBR Traffic Workloads",

Argyriou, A.; Madiseti, V. K.;

ACM Transactions on Multimedia Computing, Communications & Applications, Submitted for review in April 2005.

49. "Electronic System, Platform & Package Codesign",

Madiseti, V. K.

IEEE Design & Test of Computers, Volume 23, Issue 3, June 2006. pages 220-233.

50. "The Design of an End-to-End Handoff Management Protocol",

A. Argyriou, Madiseti, V. K.

Wireless Networks, Springer, May 2006.

51. "A Soft-Handoff Transport Protocol for Media Flows in Heterogeneous Mobile Networks ",

A. Argyriou, Madiseti, V. K.

Computer Networks, Vol 50, Issue 11, Pages 1860-1871, August 2006.

- 52. "Computationally Efficient SNR Estimation for Bandlimited WCDMA Systems"**
L. Jatunov, Madiseti, V. K.
IEEE Transactions on Wireless Communications, Volume 5, Issue 13,
December 2006, Pages 3480-3491.
- 53. "Space-Time Codes for Wireless & Mobile Applications",**
M. Sinnokrot, Madiseti, V.K.
DSP Handbook, Second Edition, 2009 (to be published)
- 54.A. Bahga, V. Madiseti, "Rapid Prototyping of Advanced Cloud-Based Systems",** *IEEE Computer*, vol. 46, no. 11, Nov 2013, pp 76-83, 2013
- 55.A. Bahga, V. Madiseti, "Cloud-Based Information Integration & Informatics Framework for Healthcare Applications",** *IEEE Computer*, February 2015.
- 56.A. Bahga, V. Madiseti, "A Cloud-based Approach for Interoperable EHRs",** *IEEE Journal of Biomedical and Health Informatics*, vol. 17, no. 5, Sep 2013, pp. 894-906, 2013
- 57.A. Bahga, V. Madiseti, "Cloud-Based Information Technology Framework for Data Driven Intelligent Transportation Systems",** *Journal of Transportation Technologies*, vol.3 no.2, April 2013
- 58.A. Bahga, V. Madiseti, "Performance Evaluation Approach for Multi-tier Cloud Applications",** *Journal of Software Engineering and Applications*, vol. 6, no. 2, pp. 74-83, Mar 2013.
- 59.Yusuf, A., V. Madiseti, "Configuration for Predicting Travel Time Using Wavelet Packets and Support Vector Regression",** *Journal of Transportation Technologies*, vol 3, no. 3, June 2013.
- 60.A. Bahga, V. Madiseti, "Analyzing Massive Machine Maintenance Data in a Computing Cloud",** *IEEE Transactions on Parallel and Distributed Systems*, vol. 23, no. 10, pp. 1831 - 1843, 2012.
- 61.N. Radia. Y. Zhang, M. Tatimapula, V. Madiseti, "Next Generation Applications on Cellular Networks: Trends, Challenges, and Solutions,"** *Proceedings of the IEEE*, Vol 100, Issue 4, pp. 841-854, 2012.
- 62.A. Bahga, V. Madiseti, "Rapid Prototyping of Advanced Cloud-Based Systems",** *IEEE Computer*, vol. 46, no. 11, Nov 2013, pp 76-83, 2013

- 63.**A. Bahga, V. Madiseti, "**A Cloud-based Approach for Interoperable EHRs**", *IEEE Journal of Biomedical and Health Informatics*, vol. 17, no. 5, Sep 2013, pp. 894-906, 2013
- 64.**A. Bahga, V. Madiseti, "**Cloud-Based Information Integration & Informatics Framework for Healthcare Applications**", *IEEE Computer*, February 2015.

Peer Reviewed Conference Publications

- 1. Dynamically-reduced complexity implementation of echo cancelers**
Madiseti, V.; Messerschmitt, D.; Nordstrom, N.;
Acoustics, Speech, and Signal Processing, IEEE International Conference on ICASSP '86. ,Volume: 11 , Apr 1986
- 2. Seismic migration algorithms using the FFT approach on the NCUBE multiprocessor**
Madiseti, V.K.; Messerschmitt, D.G.;
Acoustics, Speech, and Signal Processing, 1988. ICASSP-88., 1988 International Conference on , 11-14 April 1988
- 3. Seismic migration algorithms on multiprocessors**
Madiseti, V.K.; Messerschmitt, D.G.;
Acoustics, Speech, and Signal Processing, 1988. ICASSP-88., 1988 International Conference on , 11-14 April 1988
Pages:2124 - 2127 vol.4
- 4. WOLF: A rollback algorithm for optimistic distributed simulation systems**
Madiseti, V.; Walrand, J.; Messerschmitt, D.;
Simulation Conference Proceedings, 1988 Winter , December 12-14, 1988
Pages:296 – 305
- 5. Efficient distributed simulation**
Madiseti, V.; Walrand, J.; Messerschmitt, D.;
Simulation Symposium, 1989. The 22nd Annual , March 28-31, 1989
Pages:5 - 6
- 6. High speed migration of multidimensional seismic data**
Kelley, B.; Madiseti, V.;

Acoustics, Speech, and Signal Processing, 1991. ICASSP-91., 1991
International Conference on , 14-17 April 1991
Pages:1117 - 1120 vol.2

7. Performance of a fast analog VLSI implementation of the DFT

Buchanan, B.; Madiseti, V.; Brooke, M.;
Circuits and Systems, 1992., Proceedings of the 35th Midwest Symposium on
, 9-12 Aug. 1992
Pages:1353 - 1356 vol.2

8. Task scheduling in the Georgia Tech digital signal multiprocessor

Curtis, B.A.; Madiseti, V.K.;
Acoustics, Speech, and Signal Processing, 1992. ICASSP-92., 1992 IEEE
International Conference on ,Volume: 5 , 23-26 March 1992
Pages:589 - 592 vol.5

9. The fast discrete Radon transform

Kelley, B.T.; Madiseti, V.K.;
Acoustics, Speech, and Signal Processing, 1992. ICASSP-92., 1992 IEEE
International Conference on ,Volume: 3 , 23-26 March 1992
Pages:409 - 412 vol.3

10.Yield-based system partitioning strategies for MCM and ASEM design

Khan, S.; Madiseti, V.;
Multi-Chip Module Conference, 1994. MCMC-94, Proceedings., 1994 IEEE,15-
17 March 1994
Pages:144 - 149

11. Multitrack RLL codes for the storage channel with immunity to intertrack interference

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Ph.D. Students Graduated

1. **Brian T. Kelley, 1992**
VLSI Computing Architectures for High Speed Signal Processing
Member of Technical Staff, Motorola.

Winner of Dr. Thurgood Marshall Dissertation Fellowship Award
2. **Bryce A. Curtis, 1992**
Special Instruction Set Multiple Chip Computer for DSP
Member of Technical Staff, IBM
3. **Jaejin Lee, 1994**
Robust Multitrack Codes for the Magnetic Channel
Professor, Yonsei University, Korea
4. **Mohamed S. Ben Romdhane, 1995**
Design Synthesis of Application-Specific IC for DSP
Director of IP, Rockwell.
5. **Shoab A. Khan, 1995**
Logic and Algorithm Partitioning on MCMs
Professor, National University of Science & Technology, Pakistan
6. **Lan-Rong Dung, 1997**
VHDL-based Conceptual Prototyping of Embedded DSP Architectures
Professor, National Chaio Tung University, Taiwan.

Winner of VHDL International Best PhD Thesis Award, 1997

7. Thomas W. Egolf, 1997

Virtual Prototyping of Embedded DSP Systems

Distinguished Member of Technical Staff, Agere

8. Alvaro Marenco, 1997

On Homomorphic Deconvolution of Bandpass Signals

Professor, Texas A&M University.

Winner of GIT ECE Outstanding Teaching Assistant Award

9. Shahram Famorzadeh, 1997

BEEHIVE: A Distributed Environment for Adaptive Signal Processing

Member of Technical Staff, Rockwell.

10. Timothy J. Klausutis, 1997

Adaptive Lapped Transforms with Applications to Image Coding.

US Air Force/Univ. of Florida.

11. Lan Shen, 1998

Temporal Design of Core-Based Systems

Member of Technical Staff, IBM

12. James DeBardelaben, 1998

Optimization Based Approach to Cost Effective DSP Design

Research Scientist, Johns Hopkins University

Georgia Tech ECE Faculty Award

13. Sangyoun Lee, 1999

Design of Robust Video Signal Processors

Professor, Yonsei University

US Army Sensors Lab Research Excellence Award, 1999

14. Rahmi Hezar, 2000

Oversampled Digital Filters

Member of Technical Staff, Texas Instruments

15. Yong-kyu Jung, 2001

Model-Based Processor Synthesis

Professor, Texas A&M University

16. Mustafa Turkboylari, 2002

Handoff Algorithms for Wireless Applications

Member of Technical Staff, Texas Instruments

17. Yun-Hui Fan, 2002

A Stereo Audio Coder with Nearly Constant Signal to Noise Ratio

Post-Doctoral Research Associate, Northeastern University

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Design of a Retargetable Compiler for DSP
Member of Technical Staff, Qualcomm

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19. Chonlameth Aripnikanondt, 2004

System-on-Chip Design with UML
Professor, King Mongkut's University, Thailand.

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Performance Analysis of 3G CDMA Systems
Senior Research Scientist, Soft Networks, LLC.

21. Antonios Argiriou, 2005, Serving in Hellenic Army.

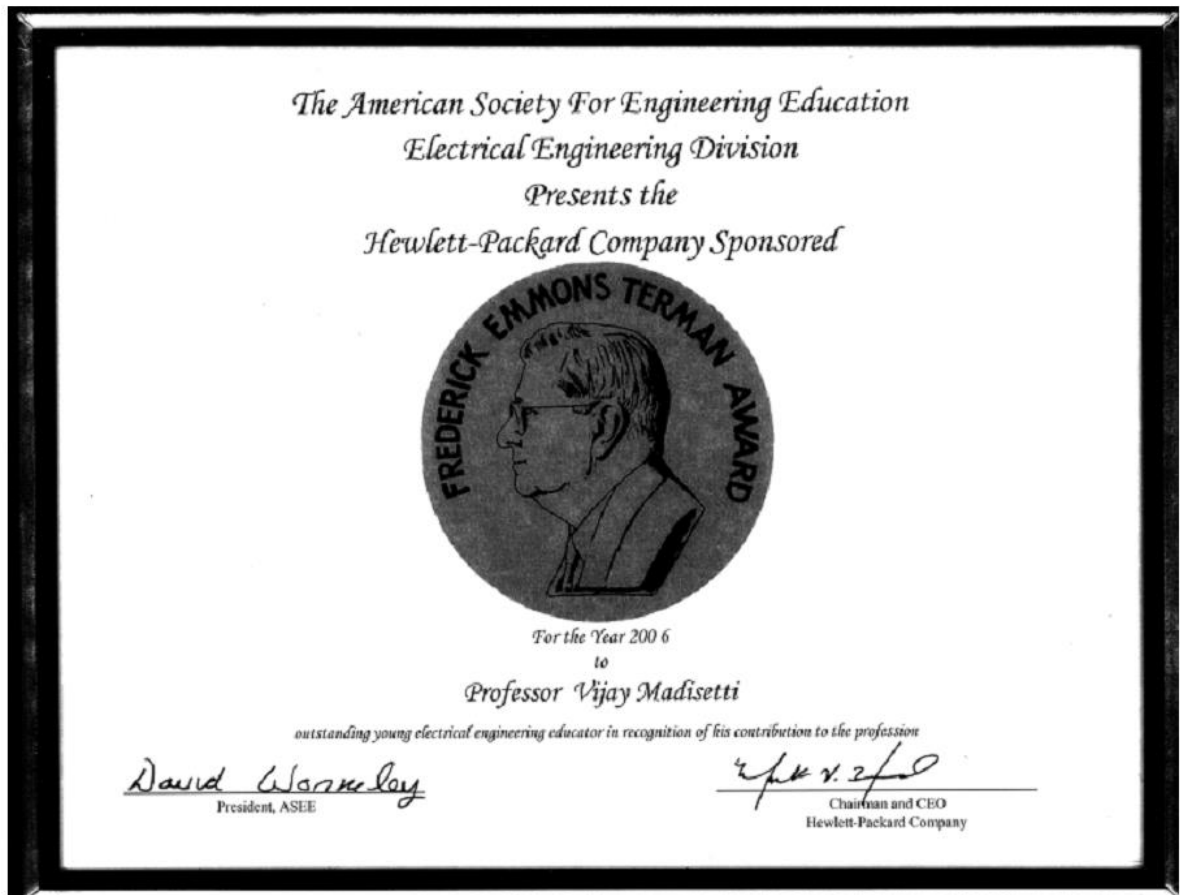
22. Pilho Kim, 2009, Scientist, VP Technologies, Inc.

23. M. Sinnokrot, 2009, Staff Engineer, Qualcomm.

Awards & Honors

1. **Jagadis Bose National Science Talent Fellowship**, Indian Institute of Technology, Kharagpur, 1980-1984.
2. **General Proficiency Prize**, Indian Institute of Technology, Kharagpur, 1984.
3. **Demetri Angelakos Outstanding Graduate Student Award**, Univ. of California, Berkeley, 1989
4. **Ira Kay IEEE/ACM Best Paper Award** for Best Paper presented at IEEE Annual Simulation Symposium, 1989
5. **IBM Faculty Development Award** 1990
6. **Technical Program Chair**, IEEE Workshop on Parallel and Distributed Simulation. 1990.
7. **Technical Program Chair**, IEEE MASCOTS'94
8. **NSF RI Award**, 1990
9. **VHDL International Best PhD Dissertation Advisor Award**, 1997

10. Georgia Tech Outstanding Doctoral Dissertation Advisor Award, 2001.
11. ASEE 2006 Frederick Emmons Terman Medal, 2006.
12. Fellow of IEEE



Intellectual Property Disclosures (Georgia Tech)

<u>Patent</u>	<u>Date</u>	<u>Description</u>
2843	2004	Method and Apparatus for Improving the Performance of Wireless LANs
2825	2003	Method and Apparatus for Optimal Partitioning and Ordering of Antennas for Layered Space-Time Block Codes in MIMO Communications Systems
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2718	2003	A Transport Layer Algorithm for Improved Anycast Communication
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2716	2003	A Transport Layer QoS Algorithm
2715	2003	A Novel Transport Layer Algorithm for MPLS Performance
2659	2002	A New Algorithm and Technology for Implementing Mobile IP with Applications to Voice and Video over Mobile IP
2656	2002	Debugging with Instruction-Level Reverse Execution
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2539		System of Databases: An Enabling Technology for Programming
2517	2002	A Dynamic Instantiated Real-Time Operating System Debugger
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2479	2001	System of Databases: A model with coordination links and a calendar application
1893	1999	Beehive
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