



ELLIOTT BIRCH

SOFTWARE ENGINEER

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 San Francisco, CA

SUMMARY

Passionate problem solver with a love for automation and simplification using programs. Proven success in architecting and developing diverse applications for real-time video communication, travel, dating, and gaming. Well-versed in aligning projects with business objectives and executing ideas from concept to completion, using agile methodologies.

EDUCATION

2016-2017
SOFTWARE ENGINEERING
Hack Reactor

2009-2011
AEROSPACE ENGINEERING
University of Tennessee

FRONT-END SKILLS

- JavaScript/ES6
- TypeScript
- React
- Angular
- HTML/CSS
- Bootstrap
- Vue
- Material UI
- Semantic UI
- Backbone

BACK-END SKILLS

- Node
- Express
- GraphQL/Apollo
- Mongo/Mongoose
- MySQL
- Docker
- PubNub
- Pub-sub
- WebRTC
- HighlandJS
- AWS
- rx-JS
- AWS Lambda

MISC SKILLS

- Mocha/Chai
- Heroku
- Gulp
- Webpack
- Sketch
- Jest

PROFESSIONAL EXPERIENCE

SOFTWARE ENGINEER

StubHub

July 2019 - Present

- Created new Storybook structure in order to streamline team's workflow, resulting in significant decrease in front end component development time.
- Worked with checkout team to implement new checkout flow, increasing customer conversion rate by ~10%
- Was key in leading front-end modernization efforts, migrating to React/GraphQL
- Helped develop code testing patterns and strategy using Jest/enzyme

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Scalable Press

May 2017 - July 2019

Design and implement internal tools to automate and streamline warehouse production.

- Architected infrastructural revamp to GraphQL, Typescript and React
- Wrote algorithms to analyze and aggregate 30k orders per day and \$400m in annual revenue
- Product Managed, Project Managed, and Architected project to standardize financial data in order to lay groundwork for an IPO.
- Redesigned internal printing templates, generating 500% increase in printing output
- Created internal processes and dashboards to enable embroidery production
- Refactored customer-facing and internal legacy web pages from angularJS to React
- Revamped job-queue/consumer workflows, reducing computational and space AWS costs by 80%
- Launched and founded sub-product (inkpop.com) from POC to beta launch

SOFTWARE ENGINEERING INSTRUCTOR

Hack Reactor

Jan - May 2017

Develop lesson plans and present daily lectures on CS fundamentals, development environment, and other advanced JavaScript concepts to classes of 50-90 students.

- Conducted weekly technical interviews to assess technical abilities of potential students
- Produced curriculum on relevant front-end frameworks and JavaScript fundamentals

PROJECTS

SOFTWARE ENGINEER

TravelApp

2016

Created an itinerary-building travel app focused on planning outdoor adventures

- Designed pre-development mockups, allowing for conversion to modular React components
- Implemented testing suite using Mocha and Chai, with over 70% testing coverage
- Built a database using Sequelize/MySQL to cache millions of data points from RIDB API and reduce application load time
- Launched the application using AWS (EC2, RDS, Redis)
- Integrated MapQuest API, Google Maps API & Google Visualization API to query, analyze and visualize elevation data