# Bryan Manuele

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# **Technologies and Architectures**

**Strong:** Javascript, ES6+, React, Redux, Jest, Routing, React-Router, CSS, LESS, Node, Express, MySQL, Mongo, Redux, AWS EC2, Lambda, S3, Cloudfront, IAM, Docker, Git, Agile, CircleCl **Experienced:** Android, Postgres, SASS, Mocha, Chai, Enzyme, Webpack, AngularJS, Vue

#### **Experience**

## Machine Learning Embedded Systems Developer (C, Python, Matlab)

Aerendir 2017-2018

- Developed a C implementation of Support Vector Machines Classifier for embedded systems
- Played a role in architecturing the data pipeline for our machine learning algorithms
- Developed and documented proprietary Digital Signal Processing (DSP) algorithms

## **Physics Show: Presenter and Coordinator**

Foothill College 2015-2017

- Developed and presented physics and engineering demonstrations to students from title X schools to increase their exposure and interest in the sciences
- Regularly presented to audiences upwards of 2000 students of all ages
- Lead the development of the demonstrations and the script

## Android Developer (Android SDK, Maven, Grunt, Gulp)

Freelance 2014-2016

- Developed and deployed three open source apps with over 5000 cumulative downloads
- Practiced agile and minimum viable product principles that allowed for responsive and scaling apps

## **Notable Projects**

Chompy Restaurants A restaurants review aggregator web app (React, Redis, AWS, MySQL)

- Generated and seeded MySQL with 10 million records and optimized queries to take < 2 ms
- Load-tested and scaled backend microservice to achieve > 1000 rps on AWS EC2 micro
- Deployed application using a microservice architecture where each module was dockerized load balanced using aws load-balancer

Symbolic-Calculus An open-source npm package for symbolic calculus (Node, Mocha, Chai, NPM)

- Developed an algorithm for string to equation-tree interpolation and for symbolic differentiation
- Wrote a robust suite of unit tests with mocha and chai and achieved 100% test coverage before deploying to NPM

FoodSpots A web app where users map out and share their favorite food spots (React, Redux, Serverless)

- Integrated interactive maps into a single-page React + Redux application using Google maps API
- Developed a continuous testing and deployment pipeline using CircleCl
- Deployed using a scale agnostic architecture built with s3, cloudfront, serverless, and AWS Lambda

## **Honorable Mention Projects:**

**LearnMachineLearningJS** A complementary repo I built for a presentation on ML in JavaScript **CoinPredict** A Python GDAX scraper that uses tensorflow to predict trends in Ethereum prices

## **Education**

Hack ReactorSan Francisco, CAAdvanced Software Engineering Immersive Program2018Foothill CollegeLos Altos, CAAA in Mathematics | AA in Physics2017

#### Personal

There's no greater joy for me than sharing with and teaching others the things that excite me. Whether the topic is technical, non-technical, scientific, or just plain fun, I've given presentations on topics ranging from the fundamentals of machine learning to a how-to on remixing songs with turntables. I'm also a regular publisher of online media, from technical articles on Medium to electronic music on Soundcloud.