

Experience

Software Engineer, Intern

Wolfram Research

Summer 2016

- Re-architected and rebuilt the file system, landing page, and a variety of other components from the ground up using React, MobX, Flow and Java.
- Wrote custom bash scripts to implement code linting both locally and on the build server, cutting code review time in half.
- Developed a scalable notification queue for the Wolfram Cloud project, which allows notifications to be pushed and dismissed asynchronously across the entire project.
- Help guide decisions on front-end tech stack and develop coding best practices.

Software Engineer, Intern

Hootsuite

Fall 2015

- Added support for custom thumbnail images on Facebook and LinkedIn by using their respective APIs and Hootsuite's Owly CloudFront database.
- Aided in the development of a unified mention system which allows users to search for one another across Twitter, Facebook, and Instagram; each mention is rendered correctly on their respective social network.
- Implemented a feature that allows users to upload, schedule, and replay videos to Facebook and YouTube to and from the AWS S3 database via signed AWS form.
- Cut setup time from days to hours by creating a build and deploy process to update Chrome Extensions.

Software Engineer, Intern

IBM

Spring 2015

- Developed a web app using D3.js and Java to visualize more than a billion dollars in IBM software revenue.
- Helped create and maintain an internal metric measurement system using where salespeople can view their information and goals, and managers can keep track of all their employees' progress.

Education

Bachelor of Software Engineering

University of Victoria (3.7 GPA)

Graduating April 2018

Projects

Code samples, additional projects, and information can be found at <http://www.JakeCooper.me/> or <http://www.github.com/JakeCooper>

PlzTeachMe: A live editing tool for teaching web development in a classroom setting (React, Firebase)

- Developed a real-time code development environment in the browser, with pub/sub updates from participants.
- Achieved "Top 10" at PennApps XV.

StockTrader: A distributed stock trading system which is capable of processing millions of transactions. (Golang, React)

- Implemented a distributed model using RabbitMQ and Redis to achieve over 20,000 transactions per second.
- Built a socket notification system to manage frontend event updates for thousands of concurrent users.

Locale: A location based chat service where users can chat with people around them. (Backbone, Node.js, CouchBase)

- Developed web socket interactions, geospatial queries, and frontend JavaScript.
- Won "Best Use of Google API" and "Best Use of Overall API" at nwHacks 2015.

BookieGG: A website that allows users to bet on their favorite e-sports teams. (JavaScript, PHP, Node, Go)

- Built a Go + Node.js system for concurrently managing hundreds of Steam bots using the unofficial Steam API.
- Developed a bot manager capable of quickly and effectively sorting items for trading using trees and hashmaps.

Notifai: A platform which uses machine learning to determine if Facebook photos are harassment. (React, Firebase)

- Trained a model to identify drugs, nudity, and various other incriminating elements and notify the user.
- Winner of "Best Privacy" hack at Dubhacks 2016.