

## Experience

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### Software Engineer, Intern

### Wolfram Research

Summer 2016, 2017

- 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.
- Cut code review time in half by implementing code linting rules locally and on the build server.
- Developed a scalable notification queue for the Wolfram Cloud project, which allows notifications to be pushed and dismissed asynchronously across the entire project.
- Helped 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

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Bachelor of Software Engineering

University of Victoria (3.7 GPA)

Graduating December 2017

## Projects

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*Demos, code samples, and additional project 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.
- Winner of "Top 10" at PennApps XV.

**Antidose:** An Android application for identifying and responding to nearby overdoses. (Java, Golang, Postgres/PostGIS)

- Developed a Golang server with a custom socket router to route live information and directions to app users.
- Winner of "Best Software Capstone" and "Runner Up" for UVic's Engineering Capstone Project.

**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.
- Winner of "Best Use of Google API", "Best Use of Overall API" and "Runner Up" at nwHacks 2015.

**Notifai:** A platform which uses machine learning to determine if Facebook photos are harassment. (Python, 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.

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

- 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.