

## Experience

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| <b>Bloomberg</b>   | <b>Software Engineer</b>        | <b>July 2018 - Present</b>   |
| <ul style="list-style-type: none"><li>Developed a GraphQL microservice for modifying and querying client commission structures.</li><li>Ported sell side C++ services to Linux and Kubernetes to allow instant rollout/rollback.</li><li>Developed a system for just-in-time verification/serialization of XML-style protocol buffers.</li><li>Aided in development of TCP-style protocol implementation of Golang services.</li></ul> |                                 |                              |
| <b>Wolfram Research</b>  | <b>Software Engineer</b>        | <b>May 2016 – July 2018</b>  |
| <ul style="list-style-type: none"><li>Rebuilt the Wolfram Cloud frontend using React, MobX, and Flow.</li><li>Created an event queue to pass information around the application.</li><li>Built out the Wolfram Files project to allow uploading/editing of Mathematica Notebooks and other files.</li><li>Cut code review by 80% by implementing code linting on development builds and pull requests.</li></ul>                       |                                 |                              |
| <b>Hootsuite</b>   | <b>Software Engineer Intern</b> | <b>Sept 2015 – Dec 2016</b>  |
| <ul style="list-style-type: none"><li>Utilized the Facebook API to create a custom thumbnail link sharing feature used by 10M+ people.</li><li>Developed a live video playback feature for Facebook and YouTube video uploading using AWS Lambdas and S3.</li><li>Cut deploy time by 90% by automating the Chrome Applications bundling and submission process.</li></ul>  |                                 |                              |
| <b>IBM</b>   | <b>Data Scientist Intern</b>    | <b>Jan 2015 – April 2015</b> |
| <ul style="list-style-type: none"><li>Visualized more than a billion dollars in IBM software sales using D3.js and graph algorithms.</li><li>Developed a metrics system for tracking employee targets and performance throughout the year.</li><li>Calculated end of year bonuses for salespeople and teams based on sales metrics and performance.</li></ul>  |                                 |                              |

## Education

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| University of Victoria (3.6 GPA) | Bachelor of Software Engineering | May 2018 |
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## Projects

*Demos, code samples, and additional project information can be found at <http://www.github.com/JakeCooper>*

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|---|----------------------------|
| <b>CoinExchange:</b> A scalable, distributed microservice-oriented cryptocurrency exchange.   | <b>TypeScript, Golang,</b> |
| <ul style="list-style-type: none"><li>Implemented a microservice architecture (RabbitMQ, Redis) to achieve 25,000+ TPS.</li><li>Built a web socket hub service to relay information to thousands of concurrent users.</li></ul> |                            |
| <b>PlzTeachMe:</b> A live editing tool for teaching web development in a classroom setting.   | <b>React, Firebase</b>     |
| <ul style="list-style-type: none"><li>Created an in-browser IDE for web development with live client synchronization.</li><li>Winner of "Top 10" at PennApps XV.</li></ul>  |                            |
| <b>Antidose:</b> An Android application for identifying and responding to nearby overdoses.   | <b>Golang, Postgres</b>    |
| <ul style="list-style-type: none"><li>Engineered a service to provide live information and turn-by-turn navigation.</li><li>Winner of "Best Software Capstone" for UVic's Engineering Capstone Project.</li></ul>               |                            |

## Skills

**Languages:** JavaScript, TypeScript, Golang, Python, Node.js, Java, C++, MongoDB, MySQL, Postgres

**Tools and Frameworks:** React, MobX, React Native, D3.js, Keras, Tensorflow, Git, Docker, Android, Redis, RabbitMQ