

Experience

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

Education

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>

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

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