

Passionate about privacy.

Interested in network security research, service development, and data visualization.

EDUCATION

- **University of Washington** Seattle, WA
Computer Science [Dean's List, 3.71 GPA] *Sep. 2016 – June. 2020*
Relevant Coursework: Security, Cryptography, Networks, Hardware/Software Interface, Data Management, OS

EXPERIENCE

- **Baffin Bay Networks** Seattle, WA
Software Intern *June 2019 - September 2019*
 - **Data Collection and Full Stack Development:** Worked with the data collection and analysis team to provide valuable insights from traffic collected by a sophisticated sensor network. Customized logging solutions in open source software, improved custom proprietary data collection services built with Golang, and developed the API for Baffin Bay's Threat Insight platform. Prototyped an internal data dashboard for monitoring the state, location, and cost of the sensor network with React.
- **F5 Networks** Seattle, WA
Software Intern *June 2018 - September 2018*
 - **F5 Labs:** Worked with a team of security researchers at F5 Labs to develop a serverless vulnerability data pipeline and API. Visualized attack data including a live threat map and contributions to Black Hat talk. Automated CVE data collection, parsing, and metrics.
- **University of Washington** Seattle, WA
Teaching Assistant *April 2018 - June 2018*
 - **Computer Programming II TA:** Taught two sections a week. Attended staff meetings, contributed to section planning, and graded assignments. Wrote and shared with my students a suite of example applications to dive deeper into the lecture material, including a brute force password guesser and a recursive puzzle solver.
- **NASA AMES Research Center** Mountain View, CA
Software Intern *June 2017 - September 2017*
 - **OpenMCT:** Implemented JSON import and export functionality for workspaces and folder hierarchies in OpenMCT, an open source mission control application. Worked on a large team in an enterprise environment; wrote extensive tests for each piece of code I contributed.

PROJECTS

- **Snooping on Cellular Gateways and Their Critical Role in ICS:** Contributed data visualizations and built tools to generate graphics for a talk given at Black Hat and Agora in 2018.
- **Riemann Sum Visualization:** Web applet that allows students to plot a curve and compute a variety of Riemann Sum values with custom function, bounds, and interval size. Built as a tool for my calculus teacher to use in his classroom as well as a method of checking my own answers on assignments. It is freely available online for curious students to experiment with.
- **Personal Website:** Built with React and SASS, hosted on an Amazon EC2 instance. All of the content comes from a static config file (src/config.json), so if you like it feel free to clone the project and customize to your liking.

TECHNICAL SKILLS

- **Proficient:** Golang, Javascript, React, Python, Java, Android SDK, Git, d3, C, GNU/Linux, MongoDB, Postgresql, Node
- **Some Experience:** Angular, AWS (Lambda, S3, Gateway, ElasticSearch, Route53, EC2), Ruby / Ruby on Rails, Racket, C++, SML, Nginx, Mininet, SQLite