

Scott Krulcik

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Education

Carnegie Mellon University

B.S. Computer Science - Minor in Business Administration - 3.65 QPA - Expected graduation in May 2018.

Saratoga Springs High School

Graduated 3 of 547 in June 2014. Scored 2400 on SAT.

Industry Experience

Google Inc. - Software Engineering Intern *May 2017 - August 2017*

Built an experimental replacement for the Google Docs, Sheets and Slides core storage service using the Cloud Spanner database. Experience and documentation from the project will guide future integrations of internal Google infrastructure with public Cloud Platform APIs. The project involved working with Spanner, SQL, Guice and Google Cloud Platform.

Google Inc. - Software Engineering Intern *May 2016 - August 2016*

Transitioned a network queue library from a blocking paradigm to an asynchronous one. Coordinated migration between international client teams with millions of users. Gained experience with API design and Dagger dependency injection.

WhatsApp (Facebook) - Software Development Intern *May 2015 - August 2015*

Created the WhatsApp Apple Watch app, implemented notification actions, and fixed a crash-inducing bug for an iOS app with hundreds of millions of users. Presented work to Apple's Watch Evangelist and WhatsApp's engineering team.

Prom App LLC - Co-Founder, Developer *July 2014 - May 2015*

Developed a multi-platform application for a partner in the fashion industry. Both the iOS and web applications launched in January 2015, reaching over 1000 users in three months. The app was built on Parse and integrated with Facebook.

Valogix LLC - Software Development Intern *June 2013 - August 2014*

Contributed data processing features and web UI improvements to an enterprise web app built on the Spring framework.

Research

School of Computer Science Honors Undergraduate Research Thesis *March 2017 - Present*

Exploring synthesizing formal information flow policies from explicit input/output examples. Advised by Jean Yang.

Planetary Robotics (CMU Lunar XPRIZE Team) *January 2016 - June 2016*

Developed a video compression algorithm for low-bandwidth transmission from the Moon. Advised by Red Whittaker.

Engineering Design and Development - Project Leader *September 2013 - June 2014*

Led a team of 21 students to design and build a stereolithography 3D printer and supporting software.

Teaching

15-539 Computer Science Pedagogy - Teaching Assistant *August 2017 - Present*

Guided teams of students creating and evaluating high school curriculum. Taught by Mark Stehlik and David Kosbie.

15-214 Principles of Software Construction - Teaching Assistant *August 2016 - December 2016*

Software engineering course focusing on design, reliability and concurrency. Taught by Charlie Garrod and Josh Bloch.

Other Experience

ScottyLabs - Director of Technology *September 2015 - Present*

Manage ScottyLabs' APIs, plan TartanHacks, and organize Crash Course and Web Dev Weekend workshops.

Programming Languages

Advanced: Java, C — Intermediate: Swift, JavaScript, SML, Python — Proficient: OCaml, bash, Objective-C, HTML, CSS

Interests

Outdoor Adventures — Hiking in the Adirondack Mountains, downhill skiing, tracking wolves in Yellowstone

History — New York State Military Museum tour guide and docent, SSHS Quiz Bowl trivia team (national semifinalist)

Sports — Kyokushin karate (2nd-degree black belt), varsity track (pole vaulter), pickup soccer