









EDUCATION

Brigham Young University

Bachelor of Science in Computer Science Minors in Mathematics, Applied Statistics GPA: 3.81 Provo, UT

Sep 2015 - Dec 2019

EXPERIENCE

Facebook/Novi

Menlo Park, CA

Production Engineer Feb 2020 - present

- Built/owned a new HTTP service to handle ingress and L7 security before hitting backend microservices. Included features: mTLS, CATs, various DDOS protections, perf tracing, system-wide monitoring and alerting
- Bootstrapped deployment infra for unique Novi compliance needs: built custom release gates, test user framework, and synthetic (JestE2E) load generator. Custom release gates resulted in overall ~300% fewer incidents in gated production environments. Test user framework/load generator identify perf bottlenecks whose fixes average 10-25% latency improvements so far
- Completed compliance and security reviews that helped unblock Novi launch

Facebook Menlo Park, CA

Production Engineering Intern

May 2019 - Aug 2019

- ♦ Built a program to diagnose low-level causes for large-scale deployment issues in the Ads Serving system
- ◆ Exposed diagnostic program with Python CLI and REACT webapp which, combined, saved the company ~\$1.2M in downtime
- Proactively built probabilistic (LSTM) noise-reduction for said program, initial version reduced noise by 45%

Microsoft Redmond, WA

Software Engineering Intern

May 2018 - Aug 2018

- Used dense cohort clustering and CNTK to improve a simple recurrent neural network for interpreting user feedback
- Identified over 30 systemic issues and reduced "false negative" loss by ~40% in August alone
- Won 3rd place globally in Hack for Good division of OneWeek hackathon for precision healthcare app

Brigham Young University

Provo, UT

Teaching Assistant & Research Analyst

Jan 2018 - Apr 2018

- Translated Excel/VBA to a sleek Python library for the Graves Research Lab to analyze proteomic biomarkers
- Developed a framework to combine large spectrometer datasets into a single quantitative "BioID"

SKILLS

- ◆ General: Learning Languages (spoken: English, French, Spanish), Linear Algebra, Bayesian Inference, Leadership
- Programming Languages: Proficient in Python; Intermediate in Rust, C++, Java, Dart, CSS, TypeScript/JavaScript; Learning Kotlin, PHP
- Tools/Methods: Linux, Git, Mercurial, Jest, Azure, CNTK, PyTorch, TensorFlow, Apache, Node.js, Spark, Flutter, REACT

COMMUNITY INVOLVEMENT & AWARDS

- University involvement: Entrepreneurship Club (VP), RHA (President), VITA (volunteer); member of ACM Club, Linux Club, Genetics and Biotech Club, University Orchestra
- ♦ University awards: Undergraduate Excellence in Mathematics Award 2018, Phi Eta Sigma, Phi Kappa Phi
- Current involvement: Foundation29 (volunteer), Toastmasters, rainbowmansion.com