

EDUCATION

UNIVERSITY OF UTAH

Computer Science B.S. with Math and Cognitive Science Minors – May 2020
Graduated Cum Laude. Recipient of the President's Scholarship, Regents' Scholarship, and Bingham Alumni Scholarship

Languages/Skills: Python, Java, C#, C++, JavaScript, C, PyTorch, TensorFlow, LaTeX

TECHNICAL EXPERIENCE

SOFTWARE ENGINEER – Meta

June 2020 to Present

Researching uncertainty quantification methods (UQM) for deep learning.
Developing a library (built on top of PyTorch) with state-of-the-art implementations and benchmarks of commonly used UQM.
Applying UQM to Facebook's production AI systems such as ranking and content classification.

SOFTWARE ENGINEERING INTERN – INSTAGRAM (Meta)

May 2019 to August 2019

Trained and deployed computer vision models that detect nudity and other negative content, processing all uploads on Instagram. Improved infrastructure that manages pipelines of media classification to human content moderation.

- Created machine learning models that score Instagram uploads on their likelihood of violating content guidelines.
- Designed and implemented an automated pipeline that adjusts classifier score thresholds at which media is sent for human content moderation.

EXPLORE INTERN – MICROSOFT AI & RESEARCH ORG

May 2018 to August 2018

Collaborated with 2 other interns to create software that extracts properties and values of a given subject from web pages.

- Feature engineering and classifier training for a table header classifier, improved existing header detection coverage by 2.6 times at 95% accuracy.
- Analyzed and processed millions of webpages. Constructed a data extraction and featurization pipeline.

UNDERGRADUATE RESEARCHER – UNIVERSITY OF UTAH

January 2018 to May 2021: Network Traffic Classification Project (NSF #1642158)

Developed similarity-based, probabilistic classification of network traffic. Part of the NetSecOps (Network Security Operations) project advised by Professors Jeff Phillips and Jacobus Van der Merwe.

- First author paper published in Springer Cluster Computing 2021.

November 2017 to December 2018: SLATE Project (NSF #1724821)

An experimental platform, implemented with Kubernetes, that hosts high performance computing resources and containerized research applications.

- Configured the Helm Charts of over 15 applications and deployed these applications on SLATE's Kubernetes clusters.
- Three publications at PEARC 2018 and 2019.