

## 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

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## TECHNICAL EXPERIENCE

### SOFTWARE ENGINEER – FACEBOOK

**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 (FACEBOOK)

**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.