#### **EDUCATION**

#### UNIVESITY 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 (data science, AI/ML packages), Java, C, C++, JavaScript

# TECHNICAL EXPERIENCE

#### SOFTWARE ENGINEER – FACEBOOK

#### June 2020 to Present

On the Probability: Uncertainty team under Facebook Research. Working on researching, developing, and applying methods that quantify uncertainty and improve robustness in machine learning and AI.

## 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 ensemble neural network and random forest 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 ARTIFICIAL INTELLIGENCE & 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.

#### RESEARCH ASSISTANT - UNIVERSITY OF UTAH

# January 2018 to Current: 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 submitted (currently under review) to Super Computing 2020

### 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 2017 and 2018