# **EDUCATION**

#### UNIVERSITY OF TEXAS AUSTIN

PhD Candidate in AI, advised by Professor Amy Zhang – August 2023 to Present

NSF CSGrad4US Fellowship, Electrical and Computer Engineering Department Fellowship

## UNIVERSITY OF UTAH

B.S. in Computer Science, Minors in Math and Cognitive Science - May 2020

Graduated Cum Laude. Recipient of the President's Scholarship, Regents' Scholarship, and Bingham Alumni Scholarship

# TECHNICAL EXPERIENCE

## RESEARCH SCIENTIST INTERN - META AI RESEARCH (FAIR)

#### June - Nov 2024

- Developed a text-to-image (T2I) model evaluation method that uses multi-modal large language models (MLLMs) to generate image prompts and judge generated images.
- MLLMs match existing T2I benchmark model rankings with 80x less prompts and achieve higher correlations with human judgments, using our method.
- First-author publication under review at CVPR 2025.

#### SOFTWARE ENGINEER - META / FACEBOOK

## December 2022 to July 2023: Gen AI Emu Stickers Model

- Trained and evaluated image generation models for AI Generated Stickers in Messenger and WhatsApp.
- Developed pipelines and metrics for evaluating generative models via human annotations of AI-generated images.
- Implemented automated prompt engineering of users' sticker searches, enabling image generation quality to reach production standards.

#### July 2022 to November 2022: Bayesian Modeling Team

- Applied Bayesian statistical modeling and inference, through an <u>in-house probabilistic</u> <u>programming language</u>, to Meta's A/B testing infrastructure.
- Implemented Bayesian optional stopping to end A/B tests early when they were predicted to result in no improvement or regression in metrics, saving revenue and resources.

#### June 2020 to July 2022: Probabilistic Neural Networks Team

- Researched methods for increasing the robustness and trustworthiness of machine learning systems by ascribing uncertainty measurements to models.
- Developed a PyTorch-based library of these uncertainty methods for deep learning.
- Main developer for the Benchmarking sub-library, an experimentation platform that allows users to simulate uncertainty in data, add uncertainty methods to models, and run uncertainty-aware experiments on simulated and SOTA benchmark datasets.
- Applied UQM to anti-scraping and computer vision models in Meta products.

#### SOFTWARE ENGINEERING INTERN – INSTAGRAM (META)

#### May 2019 to August 2019

Created computer vision models that detect guideline-violating media and auto-machine learning thresholding infrastructure that decreased the amount of non-violating media deleted off Instagram.