

Xiangyao "Axe" Tang

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Education

University of Utah

Ph.D., Computer Science

August 2024 – May 2029 (expected)

Salt Lake City, Utah

University of Utah

B.S., Computer Science, Cum Laude

August 2020 – May 2024

Salt Lake City, Utah

Projects

A Workflow-based Notebook Interface for CloudLab

January 2023 – May 2024

University of Utah, Flux Research Group

Salt Lake City, Utah

- Build a highly reliable distributed system powered by Elixir for monitoring, managing, and executing user-defined experiments on CloudLab, a network testbed
- Establish specifications and abstractions for modular, reusable workflow definition in Livebook, a Jupyter-like notebook for Elixir.
- Develop an execution framework that allows users to pause/unpause at "breakpoints" in their workflow and recover from faults using Elixir

5G "Time Travel" Analysis Framework

September 2023 – December 2023

University of Utah

Salt Lake City, Utah

- Develop a method for transferring data from previous experiments to the database using Python
- Create map overlays for displaying interesting events in the network using Python

Professional Experience

Photo Intern

August 2021 – Present

University of Utah, Utah Athletics

Salt Lake City, Utah

- Photograph sports events and deliver photos promptly

Research Assistant

May 2022 – May 2024

University of Utah, Kahlert School of Computing

Salt Lake City, Utah

- Developing a novel workflow-based notebook interface for experiments in CloudLab using Elixir
- Deployed and tested distributed TensorFlow and distributed PyTorch on CloudLab using Python
- Assist other students and faculties with their research, such as drone operation and video editing

Photo Director

July 2022 – May 2024

University of Utah, Daily Utah Chronicle (student newspaper)

Salt Lake City, Utah

- Oversee photo production of the whole organization
- Lead and manage up to eight photographers
- Coordinate with other editors to fill photo requests

Photographer

September 2021 – July 2022

University of Utah, Daily Utah Chronicle (student newspaper)

Salt Lake City, Utah

Part-time Supervisor

August 2021 – December 2022

University of Utah, J. Willard Marriott Library

Salt Lake City, Utah

Awards & Honors

Dean's List

University of Utah, John and Marcia Price College of Engineering 2020-2023

C.M. Collins Endowed Scholarship

University of Utah, John and Marcia Price College of Engineering 2023-2024

Shane V. & Robin S. Robison Endowed Scholarship

University of Utah, John and Marcia Price College of Engineering 2023-2024

Wallace Krit Petty Scholarship

University of Utah, John and Marcia Price College of Engineering 2023-2024

Joseph H. Merrill Memorial Endowed Scholarship

University of Utah, John and Marcia Price College of Engineering 2022-2023

Mavin and Tami Martin Scholarship

University of Utah, John and Marcia Price College of Engineering 2022-2023

Wilford & Dana Druk Scholarship

University of Utah, John and Marcia Price College of Engineering 2022-2023