479-970-0223 TylerTracy1999@gmail.com GitHub: <u>TylerTheCoder</u>

December 2020 GPA: 3.94 August 2020

Bachelor of Science in Computer Science, Minor in Mathematics University of Arkansas, Fayetteville, AR Master's of Science in Computer Science, Focus in Computational Complexity Theory University of Arkansas, Fayetteville, AR

Work Experience / Research

Education

Tyler G. Tracy

SERI MATS Scholar working with Redwood Research on AI control

- Worked closely with a team of MATS scholars to design and evaluate safety protocols to control AI systems working in a bash setting
- I focused on red-teaming efforts by designing methods for AI systems to hide their actions in various ways

Agent foundations research through AI safety camp

• Researched the agent structure problem. The agenda is to define shared structures that are necessary for agentic behavior.

Self-Assembly of Patterns in the abstract Tile Assembly Model

- March 2024 Published research on the formation of different patterns in the abstract tile assembly model. My work focused on proving tile complexity lower bounds of simple patterns.
- Worked closely with my professor and other collaborators and published to arxiv

Software Engineer II at SupplyPike

- October 2022 May 2024, Fayetteville AR • Led the design and development of a distributed scraper system. Utilized a queue architecture to OCR and extract data from thousands of files a day
- Spearheaded a new product's technical design and development, integrating data from multiple internal applications. The system greatly improved data visibility, accessibility, and usability across various departments.
- Worked on internal tools team to help make shared services for other teams

Software Engineer at Insurgrid

- Worked on a small agile team to build and maintain a software suite that serviced 2,000 weekly customers
- Added monitoring and alerting to our data scraping pipeline for guicker detection of malfunctioning jobs

Software Engineer at Tesseract

- Nov 2020 Jan 2022, Fayetteville AR Worked with a team of three to create and maintain a production level software application suite
- Designed and built a command center room running Linux applications on multiple large touchscreen monitors with an AR/VR interface

Software Engineering Intern at SupplyPike

- June 2018 May 2019, March 2020 June 2020, Fayetteville AR Worked as a full-stack developer on both individual and team projects
- Developed a browser extension and electron application to auto-login users into the company websites and auto-track shipments, cutting time spent looking up orders by 50%. 300 active users

Co-Founder and CTO of Sider

- November 2019 Present, Fayetteville AR Founded Sider, a company that connects small companies that need work done with skilled students who can help
- Developed a website and mobile application that facilitates the connections of companies and students. Includes chat system, integrated payment, portfolio document upload, and mobile text signup.

Software Engineering Intern for Google Cloud Auto Machine Learning Platform

- Launched beta UI for Google Cloud AutoML Video Intelligence
- Created and maintained a UI for managing video datasets and machine learning models
- Wrote more expansive unit tests for components and created integration tests to test the key functionality of pages
- Improved a bounding box common component to let users edit labels on videos, allowing higher model accuracy
- Interfaced with team members, UX designers, back-end engineers, and product managers to accomplish project goals

Accomplishments and Organizations

Founder of NWA AI Meetup June 2023 - Present Created a meetup in my community with 100+ members Facilitate discussions about news in AI and hosted events to teach others new skills Gave many presentations about the future of AI and how to approach it safely **Effective Altruism Introduction Group** Actively participating and contributing to the introduction group discussions and activities.

President of Association of Computing Machinery (200 members)

- Led a team of six officers to schedule and plan events for computer science students
- · Built relationships with local companies by facilitating campus recruiting events, tech talks, and hackathons Lead artificial intelligence, special interest group. Created a playable checkers bot to teach the basics of AI

Eagle Scout, Member of Troop 214

Jan 2023 - May 2023

Summer 2019, Seattle WA

Fall 2019 - Spring 2020

Jan 2022 - Oct 2022, Fayetteville AR

June 2024 - present

In Progress

Jan 2024 - Mav 2024