Tyler Conger

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 LinkedIn | GitHub | ✆ Website

Education

University of Alabama — Tuscaloosa, AL
Computer Science Masters of Science — August 2022 - May 2024
- **Notable Courses:** Autonomous Vehicles, Data Science, Machine Learning, Computer Security

Northern Arizona University — Flagstaff, AZ
Computer Science Bachelors of Science — August 2017 - May 2021
- Minors in Mathematics and History
- President of the Association for Computing Machinery (ACM) NAU Chapter
- Presidential Leadership fellow ✆; selected for year monthly long leadership course
- Computer Science Peer Mentor; helped first year computer science students adapt to college life
- **Notable Courses:** Data Analysis, Database Systems, Network Analysis, Advanced Web Development

Professional Experience

Marsh Digital | Software Developer — Phoenix, AZ | July 2021 - August 2022
- Deployed 5 web based applications and maintained 15 different applications using TypeScript, Angular, and Tailwind CSS for companies such as Amazon, Tesla, Polestar, Liberty Mutual, and others
- Implemented tests using JUnit, ensuring at least 70% code coverage while leveraging tools such as DataDog
- Conceived 3 different scripts in Python scripts added CI/CD pipeline for different applications
- Spearheaded a team initiative to implement modern web practices in agreement with Web Accessibility, bringing over 10 applications up to compliance with WCAG 2.0 Standards
- Added and reviewed pull requests with BitBucket, accomplishing daily tasks assigned through Jira and preserved code standards on a 10 member team
- Updated and identified security vulnerabilities over 15 separate deployment applications

NAU SICCS Lab | Research Intern — Flagstaff, AZ | January 2020 - December 2020
- Designed 3 interactive chatbots using IBM Watson artificial intelligence tools with conversational flows
- Implemented website powered by PHP, HTML, and JavaScript that hosted 2 chatbots interacted with by over 180 study participants to research register usage in chatbots and natural language processing
- Engineered several Python scripts for in task automation, natural language processing, and data analysis

Skills

Programming Languages:	Python, C, Java, JavaScript, TypeScript, R, MySQL, PHP
Libraries / Frameworks:	React, Angular, Next.JS, ROS, Tailwind CSS, NodeJS, Pandas, Keras
Tools / Platforms:	Docker, VirtualBox, Command-line, Linux, Shell, Git, AWS, JIRA, LaTeX

Projects

Self Driving Go-Kart — *ROS, Python, C/C++*
- Worked on a team that conceptualized and built a fully autonomous vehicle from the ground up, including creating specialty kart design with mounting system and points for computers and cameras
- Built a system for in-taking LiDAR camera data and output information to a ROS node with python
- Developed code that interacted with ROS node and used LiDAR data to identify the roadway boundaries and obstacles within the planned path
- Processed pathway information with ROS node that controls driving capabilities (steering, gas, brakes)

Pooled Sample Testing ✆ — *Python, TypeScript, React, JSON, MongoDB*
- Led a team that released a web based application for laboratory teams to increase processing speed of COVID test samples during the 2020 pandemic testing crisis
- Organized weekly meetings with project client, and held multiple weekly agile style team meetings
- Developed a system where users could create various groups, add users, and complete tests, allowing users to save data with a JSON data structure saved to a MongoDB server queried with MySQL
- Deployed app on AWS cloud (EC2 Instance) that used Ionic, Django and React libraries

Operating System Simulator — *C*
- Designed and programmed a simulated operating system that processed input commands in real time, written entirely in C, from the ground up, with limited use of non-basic C functionality.

Certifications and Papers

- **ML Image Processing Survey** ✆ - Investigated machine learning algorithms and image processing techniques in the context of self-driving vehicles, facial recognition, and OCR applications.
- **Network Research** ✆ - Researched the effect of 4 widely utilized home construction materials on 3 common internet protocols; TCP, FTPS, and HTTP, measuring performance impact
- **Symposium Presentation** ✆ - COVID sampling application and the effect it had in the laboratory environment. Improving testing speed and accuracy of group sample pooling
- **Symposium Poster** ✆ - Analysis of register usage in conversational AI based chatbot platforms
- **ICAgile Certified (ICP)** - International Consortium for Agile, June 2022