JONATHAN WARFIELD MEYER

Github S LinkedIn Portfolio I, warfieldmeyer@gmail.com

EDUCATION

University of California, Riverside

Master of Science in Computer Science, 3.7 GPA

June 2022

• Electives: Data Mining, Databases, Software Verification, Real-Time Operating Systems

Bachelor of Science in Computer Science, 3.33 GPA

June 2020

• Electives: Natural Language Processing, GPU Architecture, Embedded Systems

TECHNICAL SKILLS

Programming Languages: Python, C, C++, Go, TypeScript, JavaScript, HTML, CSS, Web Assembly

Data Science Frameworks: SciKit-Learn, ONNX Runtime, PyTorch

Miscellaneous Proficiency: Version Control, Regression & Unit Testing, Unix, Windows

Certification: SWIFT Yellow Belt, 2023 - Software Craftsmanship, Intel Corporation

WORK EXPERIENCE

Teaching Assistant

April 2023 - Present, September 2021 - June 2022

University of California, Riverside — Computer Science & Engineering Dept

- Led discussions & generated material for Embedded Systems courses totaling over 600 students
- Implemented AVR to Arduino lab kit migration which reduced lab kit costs by 66%, streamlined software setup process, and eliminated the need to configure virtual machines on students' computers.
- Refreshed lab assignments from term to term, which ensured students were working on up to date and relevant problems. Example assignments included a Wordle clone and a Music Player.

Graduate Student Researcher

January 2023 - March 2023, Fall 2020 - September 2021

University of California, Riverside — Computer Science & Engineering Dept

- Integrated state-of-the-art models including XGBoost, LightGBM for use in an existing predictive modeling pipeline as part of an investigation to improve on existing techniques
- Implemented automated data collection of FPGA routing resource graphs up to 10 million nodes and 100 million edges and explored Graph Neural Network machine learning methods to accelerate FPGA Synthesis Flows.

Software Engineer Intern

May 2022 - December 2022

Intel Corporation — San Diego, California (Remote)

- Collaborated with a small team on training supervised machine learning models in a simulator for a confidential product where my contributions significantly improved accuracy at no cost to speed.
- Enhanced data ingestion process to allow for additional analysis with minimal impact to throughput.
- Followed software engineering principles: testing, version control, object-oriented programming.
- Wrote documentation & tutorial to ensure work was properly transferred to team at the end of the internship.

PROJECTS

T3rra-Viz

full-stack web application with machine learning

- Classifies Iris Flower Species using XGBoost, a state of the art machine learning model.
- Cross language machine learning where the Training pipeline is in python, but inferences natively in the client's browser.
- Built on top of create-t3-app and T3 stack(TypeScript, NextJS, TailwindCSS) with ONNX Runtime integration via Web Assembly (WASM).