

# JONATHAN WARFIELD MEYER

 [Github](#)  [LinkedIn](#)  [Portfolio](#)  [j.warfieldmeyer@gmail.com](mailto:j.warfieldmeyer@gmail.com)

## EDUCATION

---

### University of California, Riverside

*MS in Computer Science, 3.7 GPA*

*June 2022*

- Area of elective study: Data Mining, Software Verification, Artificial Intelligence

*BS in Computer Science, 3.33 GPA*

*June 2020*

- Area of elective study: GPU Architecture, Programming Languages

## WORK EXPERIENCE

---

### Intel

*May 2022 - December 2022*

*Graduate Technical Intern Premium (Software Engineering Internship)*

- Created high speed and accurate machine learning performance models for virtual platforms.

- Research pending approval for public release

### UCR CSE Department

*September 2021 - June 2022*

*CSEE120B Teacher's Assistant*

- Created Updated Lab content utilizing the Arduino Platform

- Managed online discord class community

- Created python bots to improve student experience

## PROJECTS

---

### T3rra-Viz

- Web application Showcases Iris flower type prediction on an xgboost model trained in python

- Machine Learning Inference natively integrated into a Full-stack web application

- Uses [create-t3-app](#) and T3 stack (Typescript, NextJs, TailwindCSS) with onnxruntime integration

### ORE

- ONNX Runtime Examples - showcases a modular demo of utilizing ONNX Runtime, a cross language machine learning library within a docker container

- Python Training Pipeline, C++ Inferencing

- Inferences the trained model on a single core 300,000 times per second, highlighting the importance of removing disk bandwidth bottlenecks

### GNNVPR

- Created a custom Graph Neural Network combining TAG and SAGE Convolutions for predicting FPGA Routing congestion costs in open-source Verilog-To-Routing tool.

- Automated data collection & parsing of up to 500GB of graphs, up to 10m nodes & 100m edges

- Creating a Deep Learning model pipeline using PyG, Lightning, and PyTorch

## TECHNICAL SKILLS

---

**Programming Languages:** Python, C/C++, Typescript

**Data Science Frameworks:** PyTorch, SciKit-Learn

**Miscellaneous Proficiency:** Unix, Terminal/Bash, Functional Languages, Git, Version Control

## CERTIFICATIONS

---

### SWIFT Yellow Belt

*February 2023*

*Software Craftsmanship - Intel Corporation*