

Teddy. Rendahl

SOFTWARE ENGINEER · TEAM LEADER · PHYSICIST

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Experience

OSARO

San Francisco, CA

ENGINEERING MANAGER

2022 - 2023

- Architected Robotics and Computer Vision software for warehouse automation applications.
- Managed a team of up to eight engineers, aligning product requirements with technical roadmaps using Agile methodology.
- Led development of configuration management systems, data pipelines, robotic control and system monitoring software.

OSARO

San Francisco, CA

SENIOR SOFTWARE ENGINEER

2019 - 2022

- Optimized Python software, model inference, and path planning to increase robotic picking rate to over 1200 picks per hour.
- Led a cross-functional scrum team working on robotics and ML model accuracy to improve bin clear rate to upwards of 99%
- Designed APIs in a variety of protocols including HTTP and gRPC to allow customer integrations.

SLAC National Accelerator Laboratory

Menlo Park, CA

SCIENCE AND ENGINEERING ASSOCIATE

2015 - 2019

- Contributed to the massive distributed software system that allowed for attosecond resolution data collection.
- Developed a Python / Qt UI platform to display real-time system data for critical accelerator operations.
- Modernized the Python ecosystem to improve developer environments, deployment and testing processes.

Astrophysics Department at UCSC

Santa Cruz, CA

UNDERGRADUATE RESEARCHER, ASTROPHYSICS DEPARTMENT

2014 - 2015

- Developed a Python library that predicted the temporal variance in the spectrum of light emitted by young stellar populations.
- Optimized scientific algorithms to improve cycle time of large scale Astrophysics simulations.
- Contributed to a scientific publication that continued work from my thesis.

Skills

Languages Python, Rust, JavaScript, C++, HTML, SQL

Technologies Git, Google Cloud Services, Docker, HTML, Linux, gRPC, HTTP

Environments and Domains Distributed Systems, RESTful APIs, Data Pipelines, Microservices, Simulation

Education

AWARDS

2015 **Dean's Undergraduate Research Award**, Stochasticity in Nebular Emission Lines.

UC Santa Cruz

DEGREE

University of California Santa Cruz

Santa Cruz, CA

BACHELOR OF SCIENCE IN APPLIED PHYSICS

Sept 2010 - June 2014

- Diverse coursework in Electrical Engineering, Computer Science and Physics
- Dean's Honors (2013, 2014)

Open Source Projects

ainyt

AUTOMATED SOLUTIONS TO NEW YORK TIMES PUZZLES AND GAMES

- Written in Rust, uses browser automation and a variety of algorithms to solve NYT puzzles.
- Solves the Wordle game using Information Theory
- Solves the NYT Mini Crossword using ChatGPT, used as an exploration into Prompt Engineering

ugradrs

A LIGHTWEIGHT AUTOGRAD ENGINE WITH A SMALL NEURAL NETWORK LIBRARY WRITTEN IN RUST

- Intended as a personal exploration of the inner workings of neural networks.
- Allows for the creation of a DAG of scalar value operations with a small Pytorch-like API wrapper.
- Usage demonstrated on a classification dataset based on scikit-learn's make moons function