Frank Yao

linkedin.com/in/frank-yao-ucsb | frankyao@ucsb.edu | github.com/Frankushima

Summary of Qualifications

- Experience with delivering production code in a tight schedule
- Fluent in multiple programming languages: Python, C++, Java
- Excellent problem solving, communication, and collaboration skills
- Quick learner and eager to experiment with new technologies

Job Experience

Software Application Engineer Intern June 2022 - September 2022

Workday Inc. *Pleasanton, CA*

Responsible for developing a web service API to securely retrieve and upload financial transactions

- Created a web service API to allocate and share costs across companies, grants, cost centers, funding sources, etc.
- Actively participated in all Agile development activities including object-oriented design, code review, unit-testing, refinement, stand-up, etc. to deliver and maintain financial features through Workday's cloud-based platform
- Adjusted implementation according to user feedback and changing requirements in a timely manner
- Provided demonstration and presentation sessions to stakeholders and multiple development teams

Software Development Engineer Intern June 2021 - September 2021

MATRIXX Software *Foster City, CA*

Responsible for developing production Python tools for analyzing mission critical diagnostic data

- Created a CLI tool that generates human-readable tables and graphs using Matplotlib when given SNMP data
  - Includes data filtering based on user criteria (max, min, match, and range values)
- Identified a general problem of transforming native Python data structures to text-based tables and researched suitable 3rd-party solutions. Presented recommendations to management and received approval for delivery
- Designed and implemented a testing harness using Python unittest. Found bottlenecks while testing, then optimized and tuned tools to reduce runtime by **78%** when dealing with worst-scenario test cases

Projects

Fashion MNIST Image Classification Model | *Python (Neural Networks, Machine Learning)*

- Implemented a CNN (Tensorflow) to categorize images of different articles of clothing with a 91% accuracy rate

(Rocket League) x (Reinforcement Learning) | *Python (Reinforcement Learning, Neutral Networks)*

- Experimented with various RL policy optimization techniques to train a model to dribble in a game (Rocket League)

Hurling Heights | *C# (Game Development, AR/VR Development)*

- Created an AR/VR game with a unique locomotion system using an existing C# game development toolkit (Unity)

Project:Rewind | *Java (Game Development, Computer Networking)*

- Collaborated with fellow students to create a multiplayer game that became a reference project for future students

Account Manager for a Popular Computer Game | *Python (Image Recognition, Automation)*

- Developed a script that launches and enters user credentials for a popular computer game (League of Legends)

Education

University of California, Santa Barbara (UCSB) *October 2020 - June 2024*

Bachelor of Science in Computer Engineering Santa Barbara, CA

- GPA: 3.87, Dean's List
- Relevant Coursework: Data Structures, Algorithms, Object-Oriented Programming, Machine Learning, Reinforcement Learning, Digital Design, Computer Architecture, Operating Systems, Computer Security, Distributed Systems, AR/VR

Skills

Programming Languages: Python, C++, Java, C#, JavaScript, TypScript,Verilog, SystemVerilog, C, Assembly

Development Tools and Libraries: PyTorch, Tensorflow, NumPy, gtest, Python Unittest, Unity, Ardunio, SOAP UI