

Thomas Scott

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EDUCATION

University of California, Los Angeles (UCLA)

MS, Computer Science

Relevant Coursework: Reinforcement Learning, Quantum Programming

Los Angeles, CA

Expected June 2024

University of California, Irvine (UCI)

BS, Computer Science; GPA: 3.8

Relevant Coursework: Intermediate Python, Programming in C/C++, Introductory Computer Organization / Programming in Assembly, Data Structure Implementation and Analysis

Irvine, CA

June 2022

SKILLS

Programming/Scripting Languages: Python, C++, Java, C, MIPS Assembly, HTML, CSS, JavaScript, R

Tools/Frameworks: Flask, Bootstrap, MySQL, Jupyter Notebook, Git & Github, Adobe Photoshop

EXPERIENCE

UCI Physics and Astronomy

Machine Learning Researcher

Irvine, CA

April 2021 - September 2022

- Built and trained random forest machine learning models using Python libraries such as sklearn, numpy, and astropy
- Generated predicted far-infrared fluxes using ultraviolet to mid-infrared flux data from over 800,000 observations collected by the Herschel Space Observatory
- Built predictions on far-infrared fluxes with 96%+ accuracy using log-scale values

UCI School of Information and Computer Science

Computer Science Lab Tutor

Irvine, CA

September 2020 - December 2020

- Collaborated with teaching assistants for UCI's Intro to Python course to explain Python language concepts to students
- Debugged lab assignments, projects, and homework for 10 students a day on average

Southern California Linux Expo (SCALE)

Check-in Volunteer

Pasadena, CA

March 2018 & 2019

- Coordinated check-in process for expo event, as part of a team of 5 volunteers
- Interviewed the head of the volunteers for a research paper on Computer Science in high school education

California Institute of Technology

Summer Biochemistry Intern

Pasadena, CA

July 2018 - August 2018

- Conducted microbiology experiments with a lab partner as part of the Division of Chemistry and Chemical Engineering
- Grew and harvested 10+ batches of bacteria to research "gas vesicles" for improvement of ultrasound technology
- Delivered a final presentation with a lab partner to 20+ supervisors and other interns

PROJECTS

Search Engine

Full Stack Developer

Spring 2022

- Collaborated with 3 other students to write a web-crawling Python search engine to present results with query times under 300 milliseconds
- Developed a front end user interface with Flask, HTML, and CSS to accept user input and display search results

Gravity Simulation

Software Engineer

Summer 2021

- Designed an accurate simulation of gravity between 100+ free-floating objects, featuring ability to place objects within simulation and immediately observe gravitational effects on other simulation bodies
- Learned how to use bash scripts and CMake to set up the programming environment, and how to use additional C++ libraries

Columns Video Game

Software Engineer

Summer 2020

- Created a tetris-like video game using a third-party Python library Pygame with a custom GUI and images created in Illustrator and Photoshop
- Added ability to take 10+ simultaneous inputs from keyboard and play custom sound effects corresponding to moves