Tyler Morton

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EXPERIENCE

University of California, Santa Cruz

Group Tutor & Grader

Santa Cruz

March 2021 - Present

- Provide assistance and supplemental material for foundational undergraduate, computer science courses.
- Able to convey complex concepts in a simple and efficient manner.
- Lead discussions and encouraged student understanding of course related concepts: functional programming, abstract data types, data structures, computational complexity, internet protocol stack, and network calculations.

University of California, Santa Cruz

Santa Cruz

ITS Information Security Analyst

January 2021 - August 2022

- Worked with the ITS Cybersecurity & Information Security teams utilizing the NIST cyberframework & scrum framework to secure the UCSC network to thousands of faculty, researchers, staff, and students.
- Oversaw the remediation efforts of 500+ servers/endpoints connected to the campus firewall utilizing the vulnerability management tool Rapid7 InsightVM as well as vulnerability detection software tools: Suricata & Trellix.

University of California, Santa Cruz

Santa Cruz

ITS Help Desk Technician

March 2021 - April 2022

- Provided technical assistance for a variety of tools and systems to maintain an educational, work-friendly environment for staff, faculty, and students.
- Able to clearly communicate technical instructions to clients coming from a range of technical backgrounds.

PROJECTS

HTTP Server [Application written in C]

• Developed a HTTP Server utilizing the HTTP/1.1 RFC standard that accepts GET, PUT, & HEAD requests. • Developed entirely in C with a focus on standard system design practices.

ITS Student Worker Handbook [Site hosted using cloud provisioner tools]

• Created an AWS VPC hosting a website. The site supporting student workers of UCSC. It was designed for educational purposes.

Cloudcademy (A user-friendly cloud provisioning tool) [Web Application]

- Created a full stack web application that lets users build a cloud infrastructure with drag and drop components.
- Gained experience using the scrum/agile framework and working with a diverse team to develop tools.

RELEVANT COURSEWORK

Principle of Systems Design

• Analyzed design abstractions such as modularization and hierarchy. Discussed design issues, flaws and trade-offs.

Computer Networks

• System administration techniques. Analyze network systems and the Internet protocols.

Foundations of Programming Languages

• Designed programming languages and the trade-offs associated with different structures.

Data Structures & Algorithms

• Utilized Data structures to optimize algorithms and design efficient programs. Demonstrated the methodologies needed to create algorithms for complex problems.

EDUCATION

University of California, Santa Cruz Santa Cruz

B.S. Computer Science

Expected Graduation: June 2023

TECHNICAL TOOLS

Python (6 years), C (4 years), JavaScript (1 year), Rust (~2 months), AWS, Terraform, Git, Scrum/Agile Frameworks, Microsoft Office 365, Google Gsuite.