# Mitchell Elliott

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# **EDUCATION**

University of California, Santa Cruz

Sept. 2022 - Dec. 2024

M.S. Computer Science

University of California, Santa Cruz

Sept. 2018 - June 2022

B.S. Computer Science

GPA: 3.61

GPA: 3.74

# **EXPERIENCE**

**UC Santa Cruz** 

Jan. 2023 - June 2023, Sept. 2023 - Dec. 2024

Teaching Assistant Santa Cruz, CA

- 6x Head Teaching Assistant for CSE 130: Principles of Computer System Design (W23, S23, F23, W24, S24, F24)
- · Reviewed course material and assisted students with programming assignments and exam prep
- · Conducted group discussion sections, created assignments and quizzes, proctored exams, and managed course infrastructure
- Created and maintained an automated CI/CD pipeline for grading programming assignments on GitLab

**Perfectly Snug** July 2023 - Sept. 2023

Software Engineer Intern

Richmond, BC, Canada

- · Developed a custom MRP system with BOM management using Python, MySQL, Node.js, and React
- Automated manufacturing process management and part tracking
- Developed dashboards and reports using Shopify API data to optimize daily build plans
- · Integrated product testing software into a mobile app to streamline the build procedure

ParkourSC, Inc. July 2022 - Sept. 2022 Remote

DevOps Engineer Intern

- · Redesigned and implemented new alert condition policies for several Kubernetes clusters in New Relic
- Eliminated false-positive alert tickets, which increased engineer productivity and allowed for critical alerts to have higher visibility
- Created a Jira automation to mute all alerts for a cluster during an upgrade using the New Relic NerdGraph API
- Analyzed log files, viewed alert incident data, and wrote NRQL queries to investigate cluster outages

#### **PROJECTS**

# CarbonStream (UCSC M.S. Project)

Jan. 2024 - Present

- Conducted a comprehensive lifecycle analysis of storage technologies to evaluate their environmental impact
- Developed a decision-making framework integrating cost, performance, and sustainability metrics to optimize data storage
- Identified opportunities for hybrid storage architectures that improved energy efficiency by leveraging workload-specific strategies

# Multithreaded RPC Server

Oct. 2020 - Dec. 2020

- · Implemented a multithreaded remote procedure call (RPC) server to perform arithmetic operations and file services in C
- · Client requests and server responses were sent in network byte order using a custom protocol
- Server was scalable and supported recursive name resolution for variables, persistent key-value pairs, and fault tolerance

# **SKILLS**

General: DevOps, CI/CD, UI/UX, CloudOps, Full Stack Development, Systems Programming, IT, Data Analytics, Agile, Scrum

Languages: Python, C, C++, Java, JavaScript, Bash, SQL, HTML, Perl, JSON, YAML, Assembly, Go

Libraries and Frameworks: React, Bottle, Bulma.css, Flask, Py4Web, Vue.js, NumPy, pandas

Applications and Tools: Docker, Kubernetes, Node.js, Word, Excel, PowerPoint, Power Apps, Power Bi, SSMS, MySQL Workbench, Okta, Autho, Apache, Nginx, Jira, New Relic, Jenkins, GitHub, GitLab, Sourcetree, Kafka, WordPress, VirtualBox, Ghidra, CMake

Databases: MySQL, PostgreSQL, SQL Server, SQLite, Redis, Cassandra, Elasticsearch, MongoDB

IDEs: Visual Studio, VSCode, Eclipse, Xcode, PyCharm, CLion, Conda, Matlab, Vim

AWS: EC2, RDS, S3, Boto3, API Gateway, Lambda, VPC, IAM, Elastic Beanstalk, Lightsail, ECS, EKS, ELB, Route 53, VPN, ACM

Operating Systems: macOS, Windows, Linux: {Ubuntu, CentOS, Kali Linux, Fedora}, FreeBSD, Raspberry Pi OS