Muhammad Oshean Lehrmann

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Objective:

Seeking a software engineering role leveraging my experience with modern software development tools and cycles where I can expect to develop my skills further in a team environment.

Qualifications

- Programming languages: C, Python, Java, HTML/CSS, SQL, Go, Ruby on Rails, R
- Software: Github, Git Bash, IntelliJ, Atom, VSCode, Microsoft Office
- Operating Systems: Windows, Linux
- Soft Skills: computer encryption, machine learning, algorithm design, Scrum, AGILE development

Work Experience

Project Coordinator | NOVA Engineering | December 2022 – Present

- Coordinated the efforts of project managers and civil engineers for more than 20 projects.
- Managed and documented communications with clients and municipalities for ongoing projects.
- Incorporated automation for repetitive tasks into company excel and pdf documents.

Undergraduate Research Intern | Mote Marine Laboratory and Aquarium | June 2021 – August 2021

- Wrote software solutions in R, using built in statistical functions and the package ggplot2, to analyze and visualize over 5000 points of coral disease data to examine treatment efficacy.
- Designed a corallivorous snail experiment presented my findings to the principal investigators.
- Wrote tests and debugged projects in python for postdoctoral researchers, including code that extracted from a video the time fish spent in different sections of an aquarium.

Geophysical Technician / Office Assistant | Atlas SCST | August 2017 – January 2021

- Managed merging of a database of client information into a new database, which involved manually reformatting Excel spreadsheets to fit into csv files and writing SQL queries.
- Collected data for dozens of environmental and geologic studies in the field.

Undergraduate Volunteer Assistant | UC Berkeley Blackman Lab | May 2019 - August 2019

Education

University of California - Berkeley

Bachelor of Arts in Computer Science and Molecular & Cell Biology | May 2022 | GPA 3.0

MCB Focus: Genetics, Genomics, and Development

Actionmap: *Skills Used: Ruby on Rails, Agile Development, Git, Test Architecture*

- Actionmap is a SaaS app that provides users with a way to see their local representatives.
- With a group of students, I fixed bugs in the existing Ruby on Rails codebase, integrated the Google Civic Information API and OAuth2 support for Google and GitHub accounts.
- Added a user entry system for sharing relevant news articles and ratings for representatives.

End-to-End Encrypted File Sharing Service: *Skills Used: Go, Encryption Schemes*

- Designed and implemented a system in Go for storing files on insecure public servers.
- Users have reasonable assurance that the files stored using the system were secure from adversaries, and that users would not decrypt files without knowing the files had been tampered with.
- Used RSA-OAEP to public key encrypt files, and HMAC-SHA512 to simultaneously authenticate and verify the integrity of data retrieved from the public servers.

Pacman AI: *Skills Used: Python, Search Algorithms, Machine Learning*

- Wrote an agent that could navigate complex mazes that featured adversarial agents and limited maze info, using algorithms such as multiagent minimax and expectimax, and reinforcement learning.