Bardia Anvari

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Profiles

TheLickIn13Keys

Education

University of California, Davis

Prospective Computer Science & Engineering and Applied Physics Double Major

Experience

GOOP House LLC

Lead Software Engineer

- Led the architecture and deployment of GOOP House's submission system, automating event submissions, copyright verification, and declarative SoundCloud publications, reducing manual staff time per event by over 48 hours and increasing submission capacity by 200%, allowing over 1500+ event entries since launch. Utilized React.js, Node.js, Java/Spring, and Python.
- Implemented DevOps practices and CI/CD pipelines, enhancing system availability and reducing deployment time by 50%. Leveraged Docker, Kubernetes (K3s), Jenkins, and Traefik for backend architecture.
- Promoted from intern to SWE in January 2022 after significantly improving the collection and distribution of GOOP House's intellectual property. Collaborated with industry artists and <u>splice.com</u> for successful GOOP Week/Day events.

theCoderSchool

Code Coordinator and Lead Code Coach

- Taught over 120+ students programming concepts from basic Python to advanced AP CSA, full-stack development, DSA, and AI/ML. Created a motivating, fun, and customized learning environment, which significantly improved student and parent satisfaction, with all students showing measurable improvement in programming skills.
- Routinely recognized as one of the most experienced coaches at the branch, often entrusted with conducting introductory sessions for potential students. Consistently received positive feedback, leading to frequent direct requests for ongoing mentorship from parents.
- Led 12 coding boot camps, developing and refining curriculum for both beginner and intermediate students. Trained and mentored 8+ new coaches, sharing teaching techniques and methods I had developed through years of experience, improving the overall quality of instruction at the branch.
- Managed backend operations for theCoderSchool Pleasanton, handling scheduling, billing, and inquiries, and successfully onboarded 100+ new clients. Spearheaded backend automation using Zoho API and Simple Mind's cloud functionalities, reducing administrative time by 30%.

University of California, Berkeley

Research Assistant

- Contributed to groundbreaking research aimed at refining a scalable deep-learning-based earthquake monitoring system using cloud computing, helping improve the accuracy and reliability of earthquake detection.
- Developed a data processing system to visualize seismic data and integrated it into machine learning models, significantly improving the efficiency of the data pipeline. Utilized Python, TensorFlow, Kafka, and HTML/CSS to accomplish this.

Projects

Sector14

Platform for Developer Hosting

• Built a platform that offers aspiring developers affordable hosting resources via self-managed servers. Integrated an AI assistant to help developers securely deploy applications end-to-end.

React.js, Node.js, Supabase, Docker, KVM, OpenAI

MUN Manager

Model UN Club Management System

• Developed a system that automates the management of assignments, memberships, and conference registrations. Used during the 2023-2024 DHS MUN season, supporting over 200+ participants.

Java, Vaadin, Spring, PostgreSQL

The Minecraft Dojo

A custom built player-vs-player Minecraft server and client focused on training and player improvement.

• Created a player-vs-player Minecraft server and custom client, reaching 3000+ active players at its peak. Developed 30+ custom plugins + custom jar and implemented client-server integrations for aesthetic upgrades, rewards, and verification.

Java, React, Express.js, Node.js, MongoDB, Mojang API, Discord API, Bukkit API

Discord Bots

Bots for Server Automation

• Designed and deployed several Discord bots, serving over 32,000+ users across 300+ servers to automate various tasks and improve

Expected Grad. June 2028 Undergraduate B.S.

May 2021 - Present

Bay Area, CA

Aug 2022 - Present

Aug 2023 - Dec 2023

Berkeley, CA

Pleasanton, CA

server engagement.

Node.js, Discord API

Homelab

Self-Hosted Learning and Testing Environment

• Built and maintain a homelab consisting of 8 enterprise-grade servers housed in a 42U rack, configured in pairs for high-availability and AI/ML tasks via a mini GPU compute cluster. This environment is used for learning, testing, and hosting various projects for both personal and client use. Provisioned Linux VMs declaratively using Terraform and Proxmox. Projects are deployed through a Kubernetes-based DevOps pipeline, utilizing Docker, GitLab, and Grafana for monitoring.

Linux, Docker, Kubernetes, VM, Grafana, Terraform

Publications

Quantum Computing in Conjunction with Neural Networks and Graph Theory to Determine Potential Learning Disabilities ASCEF 2023, 4th Place

• Developed a method using a neural network and graph theory to identify potential learning disabilities based on learning curves. Implemented a Python-based neural network and virtualized a quantum support vector machine (QSVM) using Google Cirq and Nvidia Tesla K80 for efficient training and testing. Identified plateauing at narrative memory as a biomarker for learning disabilities.

Analyzing Network Vulnerabilities through Automated Image Extraction from Unsecured HTTP Packets ASCEF 2021, 2nd Place

Created a network security tool to expose vulnerabilities by analyzing insecure image transfers via a man-in-the-middle attack. The tool captures HTTP traffic, extracts images in real-time, and provides a detailed analysis of security weaknesses.

Certifications		
CompTIA A+	Information Technology Specialist: Python	Information Technology Specialist:
CompTIA	Certiport	Cybersecurity
		Certiport