Ryan Ahrari

Software Engineer

San Jose, CA | (408) 816-9748 | ryan.ahrari@gmail.com | www.linkedin.com/in/ryanahrari | ryanahrari.com

Dynamic and results-oriented software engineer passionate about AI and ML with an MS degree in CSE and an NLP master's thesis. Skilled in computer systems and data analytics with years of experience in programming and software development. Proficient at creating custom software, enhancing business operations, and coordinating teams. Projects created in C, Python, and JavaScript, showcasing innovative problem-solving and technical expertise, are available on <u>GitHub</u>.

Areas of Expertise & Technical Proficiencies

ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING

TensorFlow Development | Flair NLP in Python | Generative AI Certified | Creating and Working with Reinforcement Learning Models | Computer Vision with OpenCV | Data Science Ethics

APPLICATION DEVELOPMENT

C | C++ | Python | Java | Algorithms | Data Structures | Agile Methodologies | Parallel Programming
 | Firebase | Kubernetes | SQL | Oracle E-Business Suite | MATLAB | Linux | Version Control

WEB SERVICES

Azure Fundamentals Certified | Relational Databases | Network Programming | IT Administrator

SYSTEMS PROGRAMMING

Embedded C | Operating Systems Programming | Computer Architecture | Synchronization

FULL-STACK DEVELOPMENT

PL/SQL | HTML | CSS | JavaScript | Website Development | REST | SCRUM

Experience

SOFTWARE ENGINEER | INFOSYS LIMITED | JUN 2022 – SEPT 2023

Provided comprehensive solutions for client system operations, resolving issues efficiently. Developed applications using SQL and optimized data processing with Oracle E-Business Suite. Delivered prompt results, ensuring minimal disruptions. Managed and safeguarded critical client databases, ensuring high efficiency and reliability.

AI RESEARCHER | BASKIN ENGINEERING | MAR 2023 – JUN 2023

Completed an Explainability and Interpretability Analysis master's thesis project. Conducted sentiment analysis using Python and the Flair NLP tool on research papers focused on Al interpretability and explainability. Authored a comprehensive analysis of these fields, discussing future implications for Al. [Link: <u>Project GitHub</u>]

ASIC RESEARCHER | BASKIN ENGINEERING | JAN 2023 - MAR 2023

Designed a reaction-based ASIC game for the iCEBreaker FPGA board using SystemVerilog. Conducted simulations with iverilog and Verilator to ensure performance. Utilized finite-state machines for synchronization and linear-feedback shift registers for pseudo randomization to perform three rounds of

play before announcing the winner.

[Link: Game Git Repository]

PRODUCT OWNER | DELL COMPUTERS | JAN 2022 - JUN 2022

Designed a protocol using Python and REST API that improved Kubernetes cluster resiliency by over 90% through a replacement policy for cluster metadata (etcd). Collaborated with Dell's Infrastructure Solutions Group to refine requirements and ensure seamless communication with the UCSC team. [Link: Protocol GitHub]

C.S. TUTOR | BASKIN ENGINEERING | OCT 2019 – JUN 2022

Guided students in making code revisions and enhancing their understanding of Data Structures and Algorithms, Logic Design, and Computer Architecture. Led sessions for groups of 100+ students, discussing the applications and implementation of Logic Design principles.

Education

APPLIED DATA SCIECNCE PROGRAM MASSACHUSETTS INSTITUTE OF TECHNOLOGY 2025

Focus on Neural Networks, Deep Learning, and Recommendation Systems

MASTER OF SCIENCE IN COMPUTER SCIENCE AND ENGINEERING UNIVERSITY OF CALIFORNIA, SANTA CRUZ 2023

Focus on Al, Machine Learning, Computer Vision, and Data Science Ethics

BACHELOR OF SCIENCE IN COMPUTER ENGINEERING UNIVERSITY OF CALIFORNIA, SANTA CRUZ 2022

Focus on Systems Programming, Computer Architecture, and Artificial Intelligence

Certifications

- AZ-900 Microsoft Certified Azure Fundamentals [<u>Link 1</u>] [<u>Link 2</u>]
- Google Advanced Generative AI for Developers [Link 1] [Link 2]

Technical Skills

Python, C, C++, Git, Linux/Unix-based systems, MATLAB, Kubernetes, PL/SQL, Oracle EBS, SystemVerilog, Verilog, Flair, OpenCV, ASIC Design, Assembly, Firebase, Oracle Database, Java

Core Competencies

Artificial Intelligence, Computer Architecture, Software Infrastructure, Agile Development, Systems Programming

Other

- U.S. Citizen
- English, Spanish, Farsi