Zayd Abualfellat

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EDUCATION

Michigan State University, College of Engineering   E. Lansing, MI
Bachelor of Science, Computer Science, GPA: 3.758/4.0   September 2022 - May 2025
Pre-Law-based Cognate | Dean's List

TECHNICAL SKILLS

Languages: C++, Python, Lua, HTML/CSS, JavaScript, SQL
Developer Tools: Git, GitHub, Jira, Docker, AWS, Postman
AI/ML: LangChain, Ollama, NumPy, AWS Bedrock

EXPERIENCE

Amazon   E. Lansing, MI
Capstone Project Student   January 2025 - Present
- Led development of a semantic search platform for code and architecture assets, enabling developers to quickly access relevant code snippets, templates, and technical resources using natural language queries, improving search accuracy by 90% and reducing search time
- Collaborated with a team of engineers to integrate AWS services (OpenSearch, S3) and LLMs (Amazon Bedrock) for efficient asset indexing and retrieval
- Delivered a scalable solution ingesting over 1,000 assets across Python, JavaScript, and C++, achieving an average indexing time of under 30 seconds per asset

Michigan State University   E. Lansing, MI
Undergraduate Learner's Assistant   January 2023 - May 2024
- Promoted academic success of over 500 students enrolled in Introduction to Programming II and Object-Oriented Software Design by offering guidance and addressing queries through help-room and face-to-face interactions, code review, and grading, resulting in enhanced performance

Roblox   San Mateo, CA
Community Manager Intern   May 2023 - August 2023
- Pitched and led creation and programming of the Connect Hub, a Roblox experience facilitating networking amongst over 100,000 creators, through planning, implementing, and quality assurance, resulting in increased participation in workshops and other events
- Researched development support needs for international communities and executed a project to instruct creators on key aspects of game development, fostering an ability to apply acquired knowledge to challenges. Introduced initiative to Portuguese developer community, receiving over 20 valid challenge submissions in first week

Roblox   Remote
Summer Accelerator Intern   May 2022 - July 2022
- Conceptualized a proposed experience with a team of 5, planning, implementing, and debugging frontend and backend libraries and systems, leveraging Lua programming language for development

PROJECTS

Active Park Assist System Development   E. Lansing, MI
Programmer   August 2024 - November 2024
- Developed a comprehensive software requirements specification for an embedded vehicle system enabling automated parking with obstacle detection capabilities, ensuring safety-critical constraints were met and enhancing user convenience

2D Basketball Physics Engine   E. Lansing, MI

Developer   August 2023 - November 2023

- Created a C++ program to score a basketball into a goal, incorporating various physics bodies, devised a UML design outlining member variables, functions, and utilizing associations, compositions, and polymorphism, and developed a system through custom classes and functions collaborating for an end result