

Khushi Modi

kmodi@crimson.ua.edu | (205) 447-3732 | www.linkedin.com/in/khushidmodi

EDUCATION

Master of Science in Computer Science, The University of Alabama, Tuscaloosa, AL

Bachelor of Science in Computer Science, The University of Alabama, Tuscaloosa, AL

Minor: Mathematics

Honors College, Accelerated Masters Program

GPA: 4.0

EXPERIENCE

Software Development Engineer Intern, *Amazon Web Services* **May 2025 - August 2025**

- Enabled seamless integration between two internal Technology Program Manager tools by implementing shared ID logic and a **one-click form population** feature in **TypeScript/React**; **reduced ~20 hours/week per TPM** of repetitive data entry required to generate a critical analysis report.
- Designed an **end-to-end automated reporting pipeline** using **AWS (Lambda, SQS with DLQ, DynamoDB)**, enabling daily generation of a critical TPM analysis report; created **cron-triggered** and **event-driven Lambdas**, modified DynamoDB database schema, and built a **paginated API endpoint** to support scalable data retrieval and transformation for report generation.

Software Developer Intern, *Southern Company* **August 2024 - May 2025**

- Contributed to **40%** of the team's prototype development goals and **40%** of the team's emerging technology research efforts through rapid prototyping, technical exploration, and solution iteration.
- Researched and introduced a new prototyping tool and leveraged it to lead development of the team's **first production-ready** solution, setting a precedent for future projects.

Project Manager Intern, *Southern Company* **May 2024 - August 2024**

- Enhanced productivity and efficiency of **75+ employees** by securing Copilot for Microsoft 365 licenses for the department and designed trainings on leveraging Copilot for effective project administration.
- Created a strategic list of **15 AI use cases** to optimize PMO operations, presented to the supervisor, key stakeholders, and the PMO director.

Software Developer Intern, *Institute of Data and Analytics* **September 2023 - May 2024**

- Maintained data pipelines by employing database engineering principles (**ETL**) to extract data from disparate sources (files, databases, APIs, external platforms), transform using **Pandas**, and load to a data warehouse (**SQL** database system).
- Developed, streamlined, and documented software applications and scripts in **Python** and **PowerShell** to automate data pipelines.

PROJECTS

Project Management Assistant - AI Chatbot (Microsoft Azure OpenAI, Python, HTML, CSS)

- Built a **retrieval augmented generation (RAG) chatbot** using **Azure OpenAI** and **Azure AI Search** to deliver data-driven responses from an internal **vector database** and deployed internally on Azure.

AI Gift Registry Website (.NET, C#, Microsoft Azure OpenAI, Microsoft SQL Server, JavaScript, CSS/HTML)

- A full stack website with a .NET, C#, SQL backend and .NET Razor Views, JavaScript, and CSS/HTML frontend.
- Implemented **user authentication** and **role-based authorization** with **AspNetCore Identity**, enabling admin, user, and anonymous access levels with dynamic functionality and views.
- Developed **CRUD** operations for gifts and wishlists, integrated interactive reports using **Chart.js**, and **deployed** the application on **Azure**.

PHI De-Identifier | Hackathon Project (1st Place) (.NET, C#, Python, HL7)

- Built an automated PHI redaction and de-identification pipeline for large HL7 healthcare files while preserving cross-record patient consistency
- Designed and implemented an intuitive UI for secure searching and validation of de-identified patient records

LEADERSHIP EXPERIENCE

Instagram Manager, *Legacy Scholars* **August 2023 - January 2024**

- Spearheaded the launch of the organization's inaugural Instagram page, **leading a team of 3 members** in strategic planning, content creation, and engagement efforts, resulting in a **consistent reach of 480-500 accounts**.

SKILLSET

Programming Languages - Java, C/C++, C#, Python, Go, SQL, NoSQL, HTML/CSS, JavaScript, TypeScript, Kotlin, Swift

Frameworks - React, Dagger, Node.js, JUnit, Mockito, .NET

Tools/Platforms - Git, AWS, Gradle, Microsoft Azure, PowerBI, HTTP REST Protocol, MongoDB, SQL Server

Libraries - PyTorch, TensorFlow, Scikit-Learn, Cuda, NumPy, OpenCV

Relevant Coursework - Data Structures & Algorithms, Software Engineering, Database Systems, Operating Systems, Web Development, Software Interface Design, Software Security, Artificial Intelligence, Networks & Communications, High Performance Computing, Reinforcement Learning, Computational Foundations of Machine Learning