Khalilullah Mohman

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EDUCATION

George Mason University — Fairfax, VA
Bachelor's in Computer Science — *Expected November 2025*

CERTIFICATES

AWS-SAP | Certified Solution Architect - Professional — October 2023
AWS-SAA | Certified Solution Architect - Associate — August 2022
CodePath | Advanced Technical Interview Preparation — August 2024

BADGES

AWS — October 2023
- **AWS Cloud Quest | AWS Cloud Com 101 | AWS Getting started with Compute | Getting started with Storage**
- **AWS Getting started with Database | | Getting started with Networking | Getting started with Cloud Ops | Getting started with Security**

PROJECTS

Interactive Chatbot AI | interactive-chatbot-ai-link.com — July 2024
- Developed a chatbot using **React.js** and **OpenAI**, providing users with an interactive conversational interface.
- Integrated with **Firebase** for real-time data handling and **OpenAI API** for natural language processing.
- Deployed on **Vercel** with **CI/CD** practices, ensuring continuous updates and a smooth user experience.

Flashcard-SaaS-AI | flashcard-saas-ai-link.com — August 2024
- Created a SaaS product that generates dynamic flashcards using the **Llama 3.1 LLM** via the **Groq API**.
- Implemented **Stripe API** for managing subscriptions and payments, enabling a paywall feature.
- Deployed on **Vercel**, incorporating feedback for continuous product optimization.

Rate My Professor | rate-my-professor-link.com — September 2024
- Developed a web scraper to extract and index data from Rate My Professor, improving data relevance and accuracy by integrating with **Pinecone** and a custom **RAG** pipeline using **OpenAI GPT-4** via **LangChain**.
- Enhanced user query responses by leveraging the **RAG** approach, which dynamically retrieves and generates answers based on real-time indexed data.
- Deployed on **Vercel**, ensuring a seamless and efficient user experience.

Personal Portfolio | my-personal-website-link.com — June 2024
- Developed a personal website using **HTML**, **CSS**, and **JavaScript** to showcase my portfolio and professional achievements.
- Implemented responsive design principles to ensure compatibility with various devices and screen sizes.
- Deployed the website using **Vercel** for continuous integration and seamless updates.

Pantry Tracker App | my-pantry-tracker-link.com — August 2024
- Built a pantry tracker application using **React**, **Firebase**, and **Material-UI** to help users manage their pantry items.
- Implemented **CRUD** operations for managing inventory, including adding, editing, and deleting items.
- Utilized **Firebase** for real-time data storage and retrieval, ensuring a seamless user experience.
- Deployed the application using **Vercel** for continuous integration and deployment (**CI/CD**).

COURSEWORK

Advanced Technical Interview Preparation (TIP103), Codepath.org — August 2024
- Completed a rigorous technical interview preparation course focusing on data structures, algorithms, system design, and advanced coding skills.

Data Structures and Algorithms, George Mason University — October 2024

Experience

Software Engineering Fellow   July 2024 - September 2024
Headstarter AI   *Remote*

- Achieved the development and deployment of 5 AI-driven projects using **React.js**, **Next.js**, **Firebase**, **Clerk**, and **Vercel**, by following agile methodologies and incorporating **CI/CD** practices, resulting in efficient and timely project delivery.
- Led a team to build an interactive customer support agent by integrating a custom **RAG** pipeline with **OpenAI** and **Pinecone**, enabling dynamic, knowledge-based responses, which improved customer engagement.
- Designed and deployed a SaaS product that generates dynamic flashcards using **Llama 3.1 LLM** via the **Groq API**, and integrated **Stripe API** for paywall and pricing plans, increasing product monetization.
- Developed a web scraper to extract and index data from Rate My Professor into **Pinecone**, enhancing user query responses through integration with **LangChain** and **OpenAI GPT-4**, which improved data relevance and accuracy.
- Scaled web applications to over 200 users by iterating on user feedback, leading to continuous optimization of functionality and user experience.
- Enhanced technical expertise by participating in weekly mentorship sessions with industry leaders, applying new insights to real-world projects.

Data Center Physical Security Supervisor   January 2019 – July 2024
AWS - Amazon Web Services   *Herndon, VA*

- Improved incident resolution efficiency by 30% by creating, updating, resolving, and modifying Trouble Tickets for various business purposes, similar to tracking and fixing technical issues.
- Ensured secure access for over 500 clients by provisioning facility access and issuing badges, relevant for understanding and implementing secure access controls in software.
- Strengthened client and employee relationships by building, maintaining, and improving effective relationships, leading up to a 20% increase in client satisfaction.
- Secured the facility and protected data and property by providing quality security services, observing, and reporting safety concerns, security breaches, and unusual circumstances both verbally and in writing.

Technical Skills

Languages: Java, Python, HTML/CSS, JavaScript
Cloud Computing: AWS (EC2, S3, RDS, VPC, IAM, CloudFormation, DynamoDB)
Developer Tools: Eclipse, Git, VS Code, Visual Studio, IntelliJ, Firebase, Clerk, OpenAI API
Frameworks and Libraries: React, Next.js, Node.js, Material-UI, LangChain, RAG
Databases and Search: Pinecone
Deployment: Vercel, CI/CD
APIs and Integrations: Stripe API