

HITHA MAGADI VIJAYANAND

✉ hithavgowder@gmail.com ☎ (979) 344-7132 📍 College Station, Texas 🌐 hithamv 🗣️ hithamv

EDUCATION

Texas A&M University

Master of Computer Science - **GPA : 3.6/4.0**

Aug 2024 – May 2026

College Station, Texas

JSS Science And Technology University

Bachelor of Engineering Computer Science - **GPA : 3.8/4.0**

Aug 2017 – Jul 2021

Mysuru, India

TECHNICAL SKILLS

Language & Frameworks : Python, **Java**, C, C++, HTML, JavaScript, Typescript, Java, Spring Boot, PyTorch, Ruby, Node.js

Tools & Platforms : Git, Github, **AWS**, Docker, Kubernetes, **Linux**, **Unix**, Elasticsearch, Terraform, Jenkins, Jira, Splunk

Databases & Others : MongoDB, **SQL**, PostgreSQL, **DynamoDB**, **S3**, **NLP**, **AI**, **Machine Learning**, **NumPy**, **Pandas**, **TensorFlow**, Data Structures, Algorithms, Regression, Clustering, Version Control

PROFESSIONAL EXPERIENCE

Texas A&M Engineering

Software Developer - Student Assistant

Aug 2025 – Present

College Station, Texas

- Developed a production-grade, **real-time WebRTC video chat** with end-to-end encryption and Stripe payments, enabling low-latency communication for 100+ concurrent users
- Automated **CI/CD workflows**, achieving 99% deployment success and shortening release cycles for rapid feature delivery

JP Morgan Chase

Software Development Engineer 2

Jan 2024 – Jul 2024

Bengaluru, India

- Migrated a complex microservice architecture from a private cloud to **AWS ECS**, optimizing resource utilization, and improving scalability, which led to a 70% reduction in deployment time and enhanced overall system performance
- Redesigned the user notification workflow using an **event-driven architecture** powered by **RabbitMQ**, enabling the platform to handle and process over 15 million events per month without performance degradation

JP Morgan Chase

Software Development Engineer 1

Sep 2021 – Dec 2023

Bengaluru, India

- Led the end-to-end modernization of the Moneta platform by upgrading **Spring Boot** from **2.0** to **3.0** and **Java 8** to **Java 17**
- Migrated a legacy MarkLogic system to a **scalable, cloud-native architecture** leveraging **AWS S3** and **DynamoDB**, implementing multithreaded scripts to resolve versioning issues, eliminate dependency on DB admins, and reduce infrastructure costs by 80%
- Engineered a **custom search engine** using **AWS OpenSearch** serving 1500+ users, enhancing user experience and improving search accuracy by 50% through the integration of a synonym-based search feature that delivered context-aware results
- Implemented a new **indexing strategy** using AWS Elasticsearch to process and index over 1 million records, engineering custom data conversion handlers that streamlined the **data loading pipeline** and **improved search retrieval** speeds by 40%
- Created **interactive dashboards** that delivered actionable insights to over 5 internal teams, streamlining data accessibility, enhancing transparency

JP Morgan Chase

Software Engineering Intern

Feb 2021 – Aug 2021

Bengaluru, India

- Automated business report generation via **Outlook** and **Control-M**, ensuring timely delivery and reducing manual effort
- Achieved 100% method coverage with **JUnit** tests and validated performance under load using **JMeter**
- Built **REST APIs** for creating, updating, and managing Elasticsearch indices, streamlining data indexing workflows and enabling efficient **configuration management** and **system administration**

PROJECTS

Hybrid Self-RAG - Hallucination Reduction In LLM | LLM, OpenAI

Jan 2025 – May 2025

- Built a **Hybrid Self-RAG system** using Wikipedia and ArXiv APIs improving factual grounding and accuracy by 9%
- Constructed a robust **FactScore-Based** Validation framework utilizing Sentence-Transformer embeddings and cosine similarity metrics to enhance the **factual reliability of LLM outputs**, increasing the average FactScore from 0.65 to 0.87

Generator Matrix Optimization | Python, Evolutionary Algo

Jan 2025 – May 2025

- Developed a hybrid optimization pipeline integrating linear programming and evolutionary algorithms, reducing m-height in generator matrices by **15%**
- Enhanced encoding efficiency for high-reliability systems, cutting latency by **38%** and validating robustness

Multimodal Network - Calorie Prediction | CNN, RNN, LSTM

Aug 2024 – Dec 2024

- Designed a multimodal deep learning architecture that integrates **Bi-LSTM** and **CNN** components to fuse **CGM time-series data**, neural signal features, and meal images, enabling more accurate and context-aware calorie prediction
- Achieved **0.33 RMSRE**, outperforming baselines and validating multimodal integration in health ML models

CERTIFICATIONS AND ACHIEVEMENTS

- Innovation Award** by AWM JP Morgan for modernization of application in Jul 2024
- Won JP Morgan's national-level hackathon** by developing a solution to transfer large media files to AWS S3 in Aug 2022
- AWS Cloud Practitioner** certification issued by Amazon Web Services in Jul 2022