

# M V S MADHAV

Software Developer | AI/ML & Generative AI Enthusiast | BTech CSE KMIT'27

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## SUMMARY

Computer Science undergraduate with strong foundations in Data Structures, Algorithms, Backend Development, and AI/ML systems. Experienced in building scalable full-stack applications and LLM-powered systems using REST APIs, distributed architectures, and ML pipelines. Proficient in Java, Python, and system design fundamentals. Seeking SDE or AI/ML internship roles to build high-impact, production-ready systems.

## EDUCATION

### Keshav Memorial Institute of Technology (KMIT)

2023 - 2027

Bachelor of Technology, Computer Science Engineering CGPA - 8.5

### Sri Chaitanya Junior College

2021 - 2023

Intermediate (MPC) GPA - 9.8

## PROJECTS

### AI Startup Idea Validator (LLM + Full-Stack) [LIVE](#) | [CODE](#)

Aug 2025 – Oct 2025

- Built an **AI-driven platform** to validate startup ideas using LLM, AI agents, and real-time feedback.
- Designed a **3-tier architecture** integrating LLM pipelines, REST APIs, CRUD operations, and client dashboards.
- Improved backend performance **using Redis caching, idempotent APIs, and pagination** strategies.
- Integrated VectorDB for semantic retrieval and LangChain for LLM orchestration.
- Tech Stack: **React.js, Node.js (Express), FastAPI, MongoDB, VectorDB, Redis, LangChain, OpenAI API, JWT**.

### Financial Question Answering System (FinQA) [LIVE](#) | [CODE](#)

Feb 2025 - Jun 2025

- Built a **neuro-symbolic QA system** using a BERT retriever + LSTM based program generator.
- Implemented full ML lifecycle pipelines: **preprocessing, modular training, integration, evaluation**.
- Achieved ~80% accuracy with **interpretable program-step reasoning** and symbolic execution.
- Tech Stack: **Flutter, FastAPI, PyTorch, Firebase for Authentication**, ensuring scalability and performance.

### Jewellery Design Pattern Generator (Pix2Pix GAN) [LIVE](#) | [CODE](#)

Aug 2024 - Dec 2024

- Built a GAN-based sketch-to-image generation system using Pix2Pix architecture.
- Developed a real-time inference pipeline enabling **instant model previews**.
- Improved visual output quality through iterative **training** and **dataset cleaning**.
- Tech Stack: **React.js, Node.js (Express), JWT, MongoDB, TensorFlow and Flask**, ensuring performance.

## SKILLS

- Languages:** Java, Python, C++, C, JavaScript
- Frontend:** React.js
- Backend:** Node.js (Express), FastAPI, Flask
- Databases:** MongoDB, MySQL, Vector Databases
- AI/ML:** PyTorch, TensorFlow, Machine Learning, Deep Learning, LLM Pipelines, LangChain, AI Agents
- Cloud & DevOps:** AWS (EC2, S3), Docker, Redis, JWT, REST APIs
- Core CS:** Data Structures & Algorithms, OOPS

## ACHIEVEMENTS AND CERTIFICATES

- Solved **300+ Data Structures & Algorithms** problems on **LeetCode**.
- Secured **Top Team Award** at KMIT Project Expo (among 6 teams).
- Participated in national-level hackathons at **Vasavi & VNRVJIET**, building rapid production-ready prototypes.