

# VENKATA KEERTHAN NIMMALA

SDE Applied AI

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Hyderabad, TS, India



## EDUCATION

### B. Tech, Aerospace Engineering

Indian Institute of Technology, Madras (IITM)

2025    Chennai, IN

- Specialized in autonomous systems, guidance and navigation, and applied control theory.
- Worked on UAV path planning and computer vision as part of academic research.
- Awarded Scholarship for Academic Excellence.

## SKILLS

### Programming Languages:

Python (Expert)    SQL    Bash

JavaScript

Frameworks & Tools:    FastAPI

Django    Streamlit    React

Docker    Kafka    Redis    Git

CI/CD (basic)

Databases:    PostgreSQL

MongoDB    InfluxDB    MySQL

SQLite

### Algorithms & System Design:

Data Structures    Algorithms

Microservices    ETL Pipelines

Distributed Systems

Modular Architecture

System Scalability

## SUMMARY

Software Development Engineer with professional experience in building scalable backend systems, microservices, and automation solutions. Proficient in Python, FastAPI, REST APIs, system design, and rapid prototyping. Aerospace Engineering graduate from IIT Madras, passionate about solving diverse problems and delivering impactful software solutions.

## EXPERIENCE

### SDE Applied AI

Adaequare

03/2025 - Present    Hyderabad, IN

Built scalable backend systems, microservices, and automation solutions for data extraction, ETL pipelines, and rapid prototyping in the applied AI domain.

- Built backend and application for OCR and NLP/LLM pipeline. Automated extraction from over 10,000 property appraisal PDFs per year, saving approximately 300 manual hours per month driving up efficiency and reduce processing time for customers.
- Created a two-layer matching/ETL pipeline (Heuristics + LLM) standardizing 50+ tax-roll datasets/year, scaling to 3,000+ counties. Delivers fallbacks, logging, analyst-ready outputs, cuts review time by 85%, with API/CLI integration.
- Focused on rapid prototyping using FastAPI, Streamlit, and modern NLP/LLM frameworks. Enabled scalable backend systems and automated high-effort workflows.

### Part-Time Founding Engineer / Consultant

QFI Research Capital

04/2025 - 08/2025    Hyderabad, IN

Led development and strategic planning for an algorithm-driven trade execution system, including real-time analytics, risk management, and signal generation.

- Built core backend and application components using PostgreSQL, InfluxDB, Docker, Kafka, Redis, Kite Connect, and integrated risk engines, enabling real-time trade execution and data aggregation.
- Contributed to the strategy for AI integration, risk modeling, and signal generation, laying the foundation for future portfolio management extensions.

## PROJECTS

### AI Trading Platform Development

Built an algorithm-driven trading platform with real-time analytics, risk management, and modular architecture. Established foundations for portfolio management extensions and future AI-driven improvements.

### Automated Property Appraisal Extraction

Built an OCR + NLP / LLM pipeline using FastAPI, Tesseract, Detectron, NLTK, Gemini, LangChain, etc. designed to extract structured data from appraisal reports at scale. Developed frontend for demos and put in production.

### Automated ETL Pipeline

Built an ETL pipeline in Python using custom algorithms, fuzzy matching, semantic patterns, and heuristics. Designed the pipeline for iterative learning and scalability, supporting flexible data transformation and validation.

## LANGUAGES

English

Native ●●●●●

Hindi

Proficient ●●●●●



SKILLS

AI / ML:	LLM Integration	
OCR Pipelines	NLP	RAG
Agents	LangChain	

LANGUAGES

Telugu	Native	●●●●●
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AWARDS

	Scholarship for Academic Excellence - IIT Madras		Two time KVPY Fellow
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