

# Mohammed Harshath SS

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## SKILLS

### LANGUAGES

Python • C Sharp • Git  
• R • HTML • CSS • SQL  
• JavaScript

### TOOLS

Jupyter Notebooks • Google Colab • DBeaver • Git • VS Code • Microsoft Power BI Dashboards and Reports • Excel • Ollama

### FRAMEWORKS

Data Science & AI  
Machine Learning & Deep Learning :  
TensorFlow • PyTorch  
Natural Language Processing :  
NLTK • SpaCy  
Web Scrapping : BeautifulSoup •  
Scrapy • Flask • Selenium  
Testing: UI Automation Suite  
Git • Azure DevOps • PostMan • API  
Generative AI : Hugging Face Transformers • Langchain • Stable Diffusion • Code Llama

## EDUCATION

### MASTER DATA SCIENCE

IIT-M GUVI  
GRADE : A

August 2024-December 2024

### B.TECH AI & DATA SCIENCE

KATHIR COLLEGE OF  
ENGINEERING  
CGPA : 8.02  
June 2021 -May 2024

## COURSEWORK

### UNDERGRADUATE

Programming Fundamentals  
Data Structures and Algorithms  
Database Systems  
Computer Networks  
Operating Systems  
Software Engineering  
Web Technologies  
Artificial Intelligence

## EXPERIENCE

### DATA ANALYST INTERN | WEINVEST

July 2023 - September 2023 | Chennai, In

- Processed and cleaned **10,000+ investment records**, improving data quality for analysis.
- Implemented **PCA**, reducing feature dimensions by **30%**, optimizing computational efficiency.
- Conducted **K-Means clustering**, segmenting customers into **5+ distinct investment groups**, leading to better-targeted financial strategies.
- Developed **customized investment plans**, increasing portfolio returns by **15%** based on customer segmentation insights.

## PROJECTS

### VOICEGPT – MULTILINGUAL VOICE-BASED AI ASSISTANT |

PERSONAL AI PROJECT

- Developed a multilingual AI voice assistant supporting Tamil and Marathi, using **Wav2Vec2** for accurate speech-to-text conversion and **MMS-TTS** for natural text-to-speech responses.
- **Fine-tuned intent classification models** using transformer-based architectures for accurate understanding and response generation in multiple languages.
- Implemented **Retrieval-Augmented Generation (RAG)** with **Sentence Transformers** to deliver contextually relevant, real-time answers from a dynamic knowledge base.
- **Built an end-to-end, offline AI assistant system** that processes all data locally, ensuring privacy, security, and seamless user interaction without reliance on cloud-based services.

### AI AGENT – INVESTMENT ADVISORY SYSTEM | PERSONAL AI PROJECT

- Developed an AI-based investment advisory system that leverages **LangChain** and **RAG architecture** to provide personalized financial advice based on stock market data and user preferences.
- Utilized **transformer models** to predict stock price trends, enhancing decision-making by delivering tailored investment suggestions and forecasts.
- Implemented **FAISS** for efficient context retrieval, allowing the system to pull relevant financial data quickly and generate accurate, timely advice.
- **Built a scalable, modular architecture**, deploying the system in a production-ready environment to handle real-time user queries and provide personalized recommendations.

## CERTIFICATIONS

- **Master Data Science** - IITM GUVI, Dec 2024
- **Advanced Programming Professional** -IITM GUVI, Dec 2024
- **Microsoft Data Analyst (PL-300)** -Udemy, Jun 2024
- **Data Analytics with Power BI** - ICT Academy, Oct 2023