

# Meher Venkat Raman

 venkatramanmeher@gmail.com

 +91 9059032160

 LinkedIn

 GitHub

 LeetCode

## Education

---

**Integrated MTech, Computer Science & Engineering, University of Hyderabad**

2022 – 2027

GPA: 8.8

**Senior Secondary, CBSE, Sri Chaitanya**

2020 – 2022

Percentage: 93.8

## Professional Experience

---

**Summer Research Intern – Indian Statistical Institute (ISI),**

05/2025 – 07/2025

*Indian Statistical Institute (ISI)*

Kolkata, India

- Modified the Kyber post-quantum cryptographic scheme to support multiple compression (du, dv) and noise ( $\eta_1, \eta_2$ ) parameters.
- Implemented and optimized the core Kyber reference code in C for performance and efficiency evaluation.
- Built automated benchmarking tools to measure cycle counts and runtime across parameter variants.
- Conducted performance analysis and verified encryption/decryption correctness across all configurations.
- GitHub: [github.com/meher4567/kyber-dilithium-tweaks](https://github.com/meher4567/kyber-dilithium-tweaks) ↗

## Skills

---

### Programming

Python, Java, JavaScript, C, C++, SQL

### Web & Frameworks

React, Django, Flask, Vite, SCSS, FastAPI, Streamlit

### Tools & Technologies

Git, MySQL, REST APIs, WebSockets, Kubernetes, Docker, CI/CD, SQLite, SageMath

### Concepts

Machine Learning, Deep Learning, NLP, Cloud Computing, Database Management, Microservices, Post-Quantum Cryptography, MLOps, Risk Analysis

### Management

Project Management, Agile Methodologies, Team Collaboration, Strategic Planning

## Projects

---

**Algorithmic Trading System with Machine Learning**, Course Project – Algorithms & Game Theory ↗

- Developed a production-ready algorithmic trading platform integrating ensemble ML models (LSTM, Random Forest, XGBoost) for multi-stock signal generation.
- Implemented six trading strategies and a FastAPI + Streamlit interface for live signal visualization and management.
- Built a Monte Carlo risk analysis module (10,000+ simulations) with advanced metrics such as Sharpe, Sortino, and VaR.
- Designed backtesting and portfolio optimization frameworks achieving 210+ backtests across 10+ stocks with a 68% average win rate.

**AI Resume Analyzer (ML & NLP)** ↗

- Built an AI-powered resume screening system using NLP and ML.
- Extracted skills, ranked resumes, and matched job descriptions.

- Used advanced NLP techniques for semantic job-resume matching.
- Technologies: Python, TensorFlow, Pandas, Django.

### **Airline Management System (React + Django + MySQL) ↗**

- Developed a full-stack airline management system with admin & user functionalities.
- Integrated CRUD APIs for managing bookings, flights, airports, and payments.
- Implemented a role-based authentication system.
- Technologies: React (Vite), Django, MySQL.

## **Achievements**

---

**Solved 450+ coding problems on GitHub, LeetCode & GFG.**

**Received fellowship from the University for topping the class three times.**

**Top 1 percentile in Both JEE-Advanced and JEE-Mains.**

## **Certifications**

---

- - Supervised Machine Learning:  
Regression and Classification -  
Coursera
- - Neural Networks and Deep  
Learning - Coursera