

Rohith Prem S

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PROFESSIONAL SUMMARY

Aspiring Machine Learning and Full-Stack Developer passionate about architecting intelligent, scalable applications that transform raw data into actionable insights. Seeking to contribute to a dynamic organization by leveraging expertise in predictive modeling, robust backend systems, and intuitive frontend development to drive performance and real-world impact.

EDUCATION

Bachelor of Engineering in Computer Science

Saveetha Engineering College, Chennai

Sept 2023 – May 2027

CGPA: 9.3/10.0

EXPERIENCE

Software Engineering Mentee

IBM India Systems Development Lab (ISDL)

Jan 2025 – Mar 2025

Bangalore, Karnataka

- Audited **enterprise-grade software workflows** across **3+ application modules**, gaining deep insights into **scalable system architecture** and production deployment standards.
- Collaborated with senior engineers to refine **model evaluation strategies** for financial security tools, contributing to a reduction in false-positive classifications during testing phases.
- Engineered **5+ RESTful API endpoints** to streamline data exchange between backend services and client interfaces, enhancing overall system reliability.

PROJECTS

Online Course Management System | Java, Spring Boot, REST APIs, MySQL

Dec 2024 – Jan 2025

- Architected a **full-stack educational platform** managing **100+ user profiles**, facilitating seamless student registration, course enrollment, and instructor content management.
- Orchestrated robust **backend logic** across **10+ endpoints**, implementing a layered architecture to ensure modularity, data persistence, and easier future scalability.
- Enhanced maintainability by strictly adhering to **MVC design patterns**, significantly reducing code redundancy.

AI-Driven Inventory Optimization | Python, Time-Series Forecasting

Nov 2025 – Dec 2025

- Developed a **predictive demand forecasting engine** utilizing historical sales data spanning **1,000+ records** to anticipate future product requirements.
- Leveraged **time-series analysis** (ARIMA/LSTM) to mitigate supply chain inefficiencies, projecting a potential **18% reduction** in overstocking and stockout incidents.
- Visualized **inventory trends** to provide stakeholders with data-driven insights for improved operational decision-making.

Ethereum Fraud Detection | Python, Scikit-learn, Blockchain Analytics

Sept 2024 – Oct 2024

- Analyzed a dataset of **10,000+ Ethereum transactions** to engineer a machine learning classifier capable of flagging illicit activities.
- Optimized **feature engineering techniques**, resulting in a **15% improvement** in model accuracy and precision compared to baseline logistic regression models.
- Constructed a reusable **preprocessing pipeline** to automate data cleaning and normalization, accelerating the model iteration cycle.

ACHIEVEMENTS

- Winner (1st Place)** at the national-level **IBM Z Datathon 2024** for innovating a scalable data solution.
- National Top 4 Finalist** at the prestigious **ISRO-IIT Kharagpur Hackathon**.
- Semi-Finalist** in the **L&T Techgium** innovation challenge, selected among top national entries.
- Semi-Finalist** at **Flipkart GRiD 7.0**, showcasing proficiency in robotics/software challenges.
- Earned the **Oracle Database SQL Certified Associate (1Z0-914)** credential.
- Runner-up** in the **QuizOnQuants** mathematics competition at Saveetha Engineering College.
- Solved **200+ algorithmic problems** on **LeetCode**, maintaining a strong consistency streak.

TECHNICAL SKILLS

Programming Languages: Python, Java, JavaScript, SQL

Frontend: React.js, HTML5, CSS3

Backend & APIs: Spring Boot, RESTful APIs, FastAPI

Databases: MySQL, Oracle SQL

Machine Learning: Scikit-learn, TensorFlow, Pandas, NumPy, Feature Engineering

Data & Analytics: Time-Series Forecasting, Data Preprocessing, EDA

Tools & Platforms: Git, Docker, VS Code, IntelliJ IDEA, Google Colab, Jupyter