Ramuni Lalith Vishnu

B.Tech Industrial Chemistry

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Degree	University/Institute	Year	CGPA/Marks(%)
B.Tech Industrial Chemistry	IIT Hyderabad	2027	7.78
B.Tech Civil Engineering (Minor)	IIT Hyderabad	2027	N.A
XII (Telangana State Board of Intermediate Education)	Narayana Junior College	2023	93.80%
X (Board of Secondary Education Telangana State)	Gauthami Vidya Dhamam HS	2021	100.00%

SCHOLASTIC ACHIEVEMENTS

Selected for Young Innovators Program **Council of Scientific & Industrial Research CCMB** -2019
Selected for **Inter IIT Tech Meet 2024**, worked on EOL of Solar Panels and Industrial Solutions
Offered an internship under **Dr.Satish Kumar Regonda** after excelling in his course, to develop and apply **AI-ML predictive models** on data from 100+ Indian cities. -2024

WORK EXPERIENCE

Intern | ElectroChem Materials Group (May–Dec 2024)

- Developed precision lab prototypes (±0.005") and custom automated workflows using AxiDraw, Python, CMD, and Solid Edge, reducing production time by ~30%.
- Collaborated with 2 Ph.D. scholars under **Dr. Narendra Kurra** on cutting-edge electrochemical research.
- Contributed to a publication-in-progress, gaining hands-on experience in scientific experimentation and prototyping.

HACKATHONS

Mitsubishi 3D Tech Hackathon 2024 | Participant and cash prize winner

- Engineered an end-to-end pipeline for 3D point cloud semantic segmentation, tackling the critical industry challenge of slow, manual data labeling for training AI models.
- Designed and implemented a novel synthetic data generation engine in **Blender** using Geometry Nodes, which procedurally created pre-labeled point clouds and achieved a quantifiable **11x reduction in data preparation time**.
- Implemented a complete, containerized workflow using **Docker**, from processing 3D scans with **LiDAR** to applying an **advanced AI model** that automatically identified and labeled objects within the point cloud.

Finshield Hackathon 2025 | National Finalist
NPCI Hackathon 2024 Conducted by E-Cell | Qualified for Round 2

PROJECTS

End-to-End Credit Risk & Explainable AI Platform (Git Hub Link)

- Architected a sophisticated synthetic data generator using Python to create robust, large-scale datasets that simulate complex real-world financial behaviors and life events.
- Engineered a comprehensive feature pipeline with Pandas and NumPy, creating fairness-aware metrics like a custom income consistency score that intelligently handles career breaks.
- Trained, evaluated, and tuned a high-performance XGBoost classifier for credit risk prediction, systematically optimizing for key metrics like AUC-ROC and F1-Score.
- Championed model transparency by integrating the SHAP framework to build a fully explainable "glass-box" AI, delivering user-specific reasons for every prediction.
- Deployed the end-to-end solution as a containerized, multi-service application using Docker and Docker Compose, serving the ML model via a scalable REST API.

Personal Portfolio, an ongoing Full stack project.

RELEVANT COURSES

IC3023 | Machine Learning in Chemistry (ongoing)
ID1050 | Artificial Intelligence

SKILLS

Technical Skills: Python, Pandas, NumPy, Scikit-learn, XGBoost, SHAP, SQLAlchemy, LangChain, Streamlit, LLM Integration, AI Agent Development, JavaScript, Node.js, Express.js, React.js, HTML, Docker, Docker Compose, Cloud Application Deployment, REST APIs, Git, GitHub, C/C++, Blender, AutoCAD, Solid Edge, CMD, Basic Arduino, MATLAB, LaTeX |
Productivity Tools: MS Office (Word, Excel, PowerPoint), Google Workspace (Docs, Sheets, Slides, Forms), JSON, Adobe Suite, Canva |
Professional Skills: Leadership, Management, Interpersonal Communication, Teamwork, Collaborative Development, Adaptability, Analytical Thinking, Critical Thinking, User Interface Design, Data Handling, Problem-solving, Project Management, End-to-End Project Lifecycle, Inventory Management |

POSITIONS OF RESPONSIBILITY

Class Representative, Department of Industrial Chemistry – IIT Hyderabad *(Academic Year 2023–24)*
Core | Member, Torque – IIT Hyderabad *(Jan 2024 – May 2025)*
Operations Coordinator, Tinkerers' Lab – IIT Hyderabad (Academic Year 2024–25)
International Relations Cell | Outbound and Public Relations Coordinator *(Academic Year 2025-26)*

CERTIFICATES AND LICENSEES

IBM | SkillBuild | From Learner to Builder: Become an AI Agent Architect
Participated in the workshop **"Patent Filing and Prior Art Search Mechanisms: A Practical Approach"** | IISc Bangalore | Ministry of Education India