ROHITH PAVULURU

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EDUCATION

Indiana University Bloomington — Bloomington, IN
Master of Science in Computer Science; CGPA: 3.950/4 — *August 2023 - May 2025*
Courses: *Applied Algorithms, Software Engineering, Algorithms for Big Data, Data Mining, Applied Machine Learning*

BMS Institute of Technology and Management — Bengaluru, India
Bachelor of Engineering - Computer Science & Engineering; CGPA: 9.11/10 — *August 2019 - July 2023*
Courses: *Data Structures and Applications, Design and Analysis of Algorithms, Object Oriented Concepts, Computer Networks and Security, Database Management Systems, Big Data Analytics, Artificial Intelligence and Machine Learning, Neural Networks.*

EXPERIENCE

Nokia Solutions and Networks — Bengaluru, India
Student Intern — *February 2023 - July 2023*
- Configured Alertmanager for efficient handling of system alerts and used Grafana to visualize and monitor metrics. Improved 15+ Grafana dashboards, increasing system reliability by approximately 20%.
- Added CA Cert configuration in the Grafana data source section to ensure secure connections. Utilized Kubernetes, Docker, and Helm to streamline the deployment process, reducing deployment time by 25% and improving tool reliability.

Nano Robotics Embed Technologies — Bengaluru, India
Technical Intern — *July 2022 - October 2022*
- Led the development of an advanced weather forecasting model that increased prediction accuracy by 12% using multiple linear regression and Bayesian neural networks with data from the Indian Meteorological Department. Incorporating subtractive clustering techniques for data segmentation and analysis, leveraging Python and scikit-learn for execution.
- Analyzed over 1,000,000 data points, enhancing model performance. Submitted detailed reports and created 15+ interactive visualizations with Matplotlib, aiding in more informed decision-making.

PROJECTS AND PAPERS

- **CourseCraft**
  - Developed a comprehensive Learning Management System with key features including user MFA, dashboards, course management, class chat, and multimedia assignment submission. Built grading functionality for professors and engineered backend architecture using Firebase and AWS cloud services.
  - Enhanced system security by integrating Google API and Duo Authentication API. Contributed to full-stack development including frontend UI, backend logic, and database management. Collaborated effectively in an Agile team environment, participating in deployment processes and iterative development cycles.

- **Blood Registry using Blockchain**
  - Directed the front-end development and supported smart contract creation using Solidity for a web portal integrated with the Ethereum Blockchain, handling 500+ transactions securely. Accomplished secure data handling with AES encryption.
  - Part of the winning team in Asia's largest innovation hackathon, recognized for enabling transparent blood information management, ensuring privacy and integrity.
  - Blockchain Implementation for Blood Registry Using Ethereum Network *(Under Review)* – A research paper analyzing the project's implementation and addressing Ethereum's limitations in the context of blood registry management.

- **Smart Form Using ML**
  - Created a system to identify and prevent repetitive selection of projects by recognizing closely related titles. Employed cosine similarity and Natural Language Processing (NLP) techniques to analyze and compare project titles with similar meanings, achieving a 95% accuracy rate and reducing project selection time by 40%.
  - Developed the application using Django and designed an intuitive user interface to facilitate easy interaction with the system.
  - This project was assigned by our professor, who entrusted us with the task, reflecting the confidence placed in our ability to deliver a functional and reliable solution for the institution, which was then successfully rolled out across 5 university departments, impacting over 1,000 students and faculty

TECHNICAL SKILLS

- **Programming Languages:** Python, Java, C, C++, JavaScript, SQL
- **Web Development & Testing:** HTML5, CSS3, Tailwind, JavaScript, React, Node.js, Next.js, Django, Selenium
- **Databases & Cloud Computing:** MongoDB, MySQL, AWS (Amazon Web Services), Google Cloud, SQLite
- **Data Science & Machine Learning:** PyTorch, Scikit-learn, OpenCV, Pandas, Numpy, Matplotlib
- **DevOps & Version Control:** GIT, Docker, Jenkins | **Tools & Platforms:** Postman, UFT, Jira, UIPath Studio, Android Studio, Firebase, Linux

CERTIFICATIONS AND AWARDS

- **AWS Certified Cloud Practitioner**
  Amazon Web Services (AWS), August 2024.

- **Winner, Smart India Hackathon 2022**
  Achieved first place in Asia's largest innovation hackathon with the "Blood Registry Using Blockchain" project.