ROHITH PAVULURU

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PROFESSIONAL SUMMARY

Software Engineer with experience in **scalable system design, full-stack development**, and **performance optimization**. Specializing in **Python, Java, JavaScript**, and **cloud infrastructure**, I build **robust, user-focused solutions** from low-level systems to customer-facing UIs. Proven track record in **collaborative development workflows** with demonstrated success in **code quality** and **system maintainability**.

TECHNICAL EXPERTISE

- **Programming Languages:** Python, Java, JavaScript, C, C++, Go, SQL.
- **Web Development:** React, Node.js, Django, HTML5, CSS3, Next.js, RESTful APIs.
- **Cloud & Infrastructure:** AWS (Lambda, S3, IoT Core), Docker, Kubernetes, CI/CD, Git.
- **Databases & Systems:** MySQL, MongoDB, Snowflake, distributed systems, performance optimization.
- **Development Tools:** Git, Jenkins, GitHub Actions, Postman, Linux, Firebase, Agile methodologies.
- **AI & Data Processing:** Machine Learning (ML), PyTorch, scikit-learn, data pipelines, real-time processing.

EDUCATION

Master of Science in Computer Science | Indiana University Bloomington | GPA: 3.97 | May 2025
Coursework: Applied Algorithms, Software Engineering, Machine Learning (ML), Big Data Applications
Bachelor of Engineering | BMS Institute of Technology and Management | CGPA: 9.11 | May 2023

PROFESSIONAL EXPERIENCE

Indiana University Bloomington — Bloomington, United States
Software Engineer — *January 2025 - July 2025*

- Built **scalable Smart Feedback System** using **AWS cloud services** for automated quiz generation with **intuitive UI/UX design**, achieving **3x improvement in qualitative feedback** generation.
- Developed **drag-and-drop and image grouping functionalities** using modern **JavaScript frameworks**, generating 1,000+ unique interpretations for enhanced data analysis.
- Designed **performance-optimized UI components** ensuring efficient data collection processes for both research and production environments.

Nokia Solutions and Networks — Bengaluru, India
DevOps Engineer — *February 2023 - July 2023*

- Engineered **large-scale monitoring solutions** using **Kafka** and **Grafana**, improving **system reliability by 22%** and optimizing incident response workflows.
- Built **CI/CD pipelines** with **Kubernetes** and **Docker**, accelerating deployments by **25%** while achieving **50% reduction in image sizes** through optimization techniques.
- Maintained **92.4% code coverage** through rigorous testing frameworks, ensuring robust and maintainable software deployments.

Nano Robotics Embed Technologies — Bengaluru, India
Software Engineer — *July 2022 - October 2022*

- Developed **machine learning models** using **AWS services** (IoT Core, Lambda, S3, SageMaker), boosting forecasting **accuracy by 12%** while processing **1M+ data points**.
- Built **real-time alert system** with **API integration** (Twilio), creating automated notifications that enhanced public safety across 10km radius coverage.

Pramahasoft Solutions Pvt Ltd — Hyderabad, India
Software Engineer — *February 2021 - June 2022*

- Architected **scalable data pipelines** processing **200,000+ transactions hourly** with **98.92% accuracy**, implementing **real-time streaming** and automated workflows.
- Built **centralized reporting infrastructure** accelerating report generation by **40%** while handling **2x larger datasets**, demonstrating expertise in performance optimization.

ACADEMIC PROJECTS

- **CourseCraft - Learning Management System**
  - Engineered **full-stack LMS** with **Firebase** and **AWS**, implementing **multi-factor authentication** and role-based access control for enhanced security.
  - Collaborated in **Agile development team**, delivering scalable educational platform with differentiated dashboards and diverse assignment management capabilities.
- **Smart Form - NLP Duplicate Detection**
  - Built **Django application** with **NLP algorithms** achieving **95% accuracy** in duplicate detection, reducing project selection time by **40%** across 5 university departments.
  - Deployed to **1,000+ users** with **4.8/5 user satisfaction score**, demonstrating expertise in user-focused design and scalable system deployment.