

Manish Reddy

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Experience

DevOps Engineer Intern

May 2024 – September 2024

VelocityOne Group

Irvine, CA

- Configured and monitored network infrastructure, including routers, firewalls, and VPNs while collaborating with IT teams to automate AWS cloud resource management (EC2, S3) leveraging Python and Bash scripting, led to a 10% improvement in uptime and a 30% reduction in deployment time.
- Achieved Built Developed and maintained CI/CD pipelines with Jenkins and Docker, increasing application deployment efficiency and improving software delivery processes.
- Packaged applications using Docker to maintain consistent environments across development and production, significantly boosting operational reliability and minimizing deployment discrepancies.

Software Engineer

October 2021 - November 2022

IAEC Consultants Pvt Ltd

Hyderabad, TS

- Led full-stack development of IAEC Consultants Pvt Ltd.'s website with HTML5, CSS3, JavaScript, and Node.js, resulting in a 30% increase in website traffic and revamped user engagement.
- Managed development of a scalable online onboarding system with Express.js and MongoDB, directing a team to reduce onboarding time by 40%, and launched the system using Docker for production environments.
- Engineered dynamic user interfaces with React.js, spearheading the initiative to enhance user engagement through interactive elements, and automated deployments via CI/CD pipelines for faster release cycles.

Software Engineer Intern

May 2021 – September 2021

Electronics Corporation of India Limited

Hyderabad, TS

- Constructed and fine-tuned a predictive algorithm based on Random Forest to forecast flight delays with an accuracy rate of 85%, resulting in a significant reduction in passenger inconvenience and operational costs.
- Prototyped algorithms such as K-means clustering and Support Vector Machines to assess feasibility and potential impact, demonstrating agility and adaptability in exploring new solutions.
- Designed and expanded machine learning applications for optimizing decision-making processes, utilizing containerization with Docker to manage consistent environments and streamlined deployment.

Academic Projects

Predicting Flight Delays with Error Calculation | Python, Django, XGBoost, Random Forest, AWS S3, Pandas

- Engineered and implemented machine learning models (Random Forest, XGBoost) to forecast flight delays, leveraging real-time data processing, improving accuracy by 10%.
- Integrated AWS services and developed a robust backend operated with Python and Django to boost performance, efficiently manage large datasets, and ensure real-time data ingestion.

Simulation of Spiltwise | React.js, MySQL, Node.js, MongoDB, Kafka, AWS EC2, Redux

- Built a prototype of a Spiltwise-like website enabling users' interactions and communities' discussions.
- Deployed application on a scalable 4-node AWS cluster, leveraging microservice architecture and integrating MySQL and MongoDB for data management and Kafka for real-time updates.

Alert System for Drivers by Traffic Sign Board Recognition | Python, TensorFlow, Keras, OpenCV, AWS EC2

- Created a Convolutional Neural Network based traffic sign recognition system with high accuracy on GTSRB dataset.
- Launched model on AWS EC2 for real-time driver alerts, enhancing driver safety.

Technical Skills

Programming Languages:	Python, C, C++, JavaScript, TypeScript, SQL, HTML, CSS
Frameworks & Libraries:	React.js, AngularJS, Django, Flask, Node.js, OpenCV, Scikit-learn, TensorFlow, Keras
Databases:	MySQL, PostgreSQL, MongoDB
Cloud Technologies:	AWS EC2, ECS, EKS, S3, RDS, Azure
Tools:	Git, GitHub, Docker, Kubernetes, Jenkins, CI/CD, Linux, Postman, VSCode, Tableau

Certifications & Publications

- AWS Certified Solutions Architect – Associate ([View Certificate](#))**
- Published a paper- "Predicting Flight delays with Error Calculation using Machine Learning in YMER Scopus Active Journal, Volume 21, issue 05, May-2022. ISSN-0044-0477

Education

California State University Fullerton

Fullerton, CA

Master of Science in Computer Science (GPA – 3.83/4.0)

January 2023 – December 2024

Coursework – Advanced Database Management, Web Back-End Engineering, System and Software Standards, Advanced Blockchain Technologies, Cyber Forensics