Salman Mohammed

+1-646-244-4932 | Salmanmohammed2018@gmail.com | LinkedIn | GitHub

Profile

Machine Learning Engineer with a proven track record in building scalable ML operations pipelines and deploying models using CI/CD and cloud containerization. Skilled at designing robust monitoring systems, diagnosing deployment issues, and documenting end-to-end processes. Experienced in collaborating with multidisciplinary teams to drive continuous improvements in production environments.

Education

Saint Louis University **May 2025**
Master of Science, Analytics

Jawaharlal Nehru Technological University **May 2021**
Bachelor of Technology

Experience

Data Evolve Solutions **Jan 2023 - Aug 2024**
Machine Learning Engineer

- Collaborated with cross-functional teams on the Digi Yatra project to enhance airport efficiency and security through advanced facial recognition technology.
- Developed an AI model for boarding pass scanning using PyTorch, improving classification accuracy via transfer learning and ensemble techniques.
- Designed and maintained scalable ML operations pipelines by engineering a YOLOv7-based Barcode Detection Model, containerized with Docker and deployed on Amazon EKS via KServe.
- Implemented robust CI/CD practices by deploying APIs through AWS API Gateway and Lambda, ensuring seamless integration and reliable system performance.
- Optimized real-time flight data collection using Docker, cron jobs, RabbitMQ, and Amazon MQ to support continuous pipeline uptime.
- Managed containerized deployments on AWS ECR and ECS to onboard airports into Digi Yatra, following security and scalability best practices.
- Configured load balancers and developed scalable Python applications using AWS Lambda to support parallel testing environments.

Ineuron **Nov 2021 - Aug 2022**
Data Science Intern

- Developed a Random Forest regression model for Rental Bike Share Prediction, achieving an 80% accuracy improvement and deployed using Heroku.
- Built Logistic Regression and SVM models for Algerian Forest-Fire Classification, achieving 85% accuracy through kernel methods and feature selection.
- Conducted comprehensive model evaluation using MAE, RMSE, Precision, Recall, and F1-Score with cross-validation to ensure predictive reliability.
- Created interactive dashboards with Matplotlib, Seaborn, and Plotly to effectively communicate data insights to stakeholders.

Projects

Health Risk Assessment Portal - Capstone Project
Saint Louis University

- Built a machine learning-based web app using Python, FastAPI, and React to predict risks of diabetes, heart disease, and kidney disease.
- Used Synthea-generated EHR data and implemented Random Forest models achieving 85%+ ROC-AUC.
- Developed backend data pipelines for preprocessing and feature engineering.
- Deployed the application on Vercel, enabling real-time risk assessments and visual dashboards for healthcare administrators.

Skills

- **Programming & Tools**: Python, SQL, MongoDB, Git, CI/CD, Docker, Kubernetes, AWS, GCP, Power BI
- **Frameworks & Libraries**: PyTorch, TensorFlow, Keras, JAX
- **AI/ML & Domain Expertise**: Machine Learning, Deep Learning, LLMs, Transformer Models, NLP, Reinforcement Learning, Knowledge Distillation, Model Compression, Evaluation Metrics, Data Analytics, Product Innovation
- **Data & Analytics**: EDA, Feature Engineering, Pandas, NumPy, Scikit-learn, Matplotlib, Seaborn, Plotly, Computer Vision