Aakanksha Padmanabhan

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EDUCATION

Rochester Institute of Technology, Rochester, NY **GPA 3.7** Masters of Science in Computer Science Dec 2024 **GPA 3.8** K.J Somaiya Institute of Engineering and Information Technology, Mumbai, India Bachelors of Engineering, Information Technology Jun 2021

TECHNICAL SKILLS

Programming & Analytics: Python, SQL, R

Machine Learning: Scikit-learn, Pandas, NumPy, XGBoost Visualization: Tableau, Power BI, Matplotlib, Seaborn

Databases: PostgreSQL, MySQL

Cloud Platforms: AWS (Lambda, S3, Dyanmodb, API Gateway), Terraform

WORK EXPERIENCE

Bright Mind Enrichment and Schooling (BMEAS)

San Francisco, CA Jan 2025 - Present

Data Analyst

- Analyzed volunteer resource allocation and workload distribution across 12 teams using SQL and R clustering analysis, identifying scheduling inefficiencies and recommending optimized task assignments to improve operational efficiency
- Built comprehensive PostgreSQL database tracking volunteer metrics including joining trends by resident status, team locations, weekly hours completion rates, and grant status by team, enabling data-driven program management decisions
- Developed predictive models using R time series analysis to forecast volunteer joining trends and availability patterns, achieving 86% accuracy against historical baselines to support strategic planning for 30+ annual events
- Created 10+ interactive dashboards analyzing volunteer contribution patterns across grant teams, street care programs, and new joiner trends, providing stakeholders real-time visibility into program performance and volunteer engagement

Rochester Institute of Technology

Rochester, NY

Data Analyst

Mar 2023 - Dec 2024

- Analyzed user behavior patterns on alumni and giving web pages using Python and SQL, identifying top conversion paths and key drop-off points to support website optimization strategies
- Collaborated with marketing teams to monitor donation metrics and web performance, providing data insights that supported a 6-month fundraising campaign
- Conducted A/B testing on email newsletters and donation pages with 1,000+ recipients, measuring open rates, click-through rates, and unsubscribe patterns to optimize engagement
- Built 6 interactive dashboards in Looker Studio and Tableau tracking campaign KPIs (CTR, conversions, bounce rate) for 10+ stakeholders, enabling data-driven marketing decisions

Mumbai, India

Application Developer Associate - Data Engineering & Analytics Support Team

Jun 2021 – Aug 2022

- Developed ETL pipelines using Talend and SQL to process and integrate large datasets (50M+ records), supporting data quality improvements for client systems
- Built predictive models using Scikit-learn for maintenance analytics, contributing to failure prediction systems and operational optimization initiatives
- Created automated classification systems to process insurance claims, achieving 94% accuracy on validation data and supporting high-volume claim processing workflows

PROJECTS

How Similar Are You To A Celebrity | React, Lambda, Rekognition, API Gateway, DynamoDB, Terraform, CloudWatch

- Built a full-stack serverless web app enabling users to compare selfies with celebrity faces using AWS Rekognition, achieving 70% matching accuracy and enhancing user engagement
- Deployed scalable infrastructure with Terraform and implemented CI/CD via AWS Amplify, reducing deployment time by 40% with CloudWatch monitoring.

Credit Card Fraud Detection with Real-Time Monitoring Python, SMOTE, Random Forest, Neural Network, Streamlit

- Developed an end-to-end fraud detection pipeline using SMOTE + ENN for class balancing and Random Forest & Neural Networks for classification, improving F1-score by 25% and reducing false positives by 18%
- Deployed a real-time monitoring dashboard in Streamlit, enabling instant fraud insight and visualizations with automated updates on new transactions