RUTIKA AVINASH KADAM

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LinkedIn | GitHub | Portfolio

EDUCATION

Stony Brook University — Stony Brook, USA
Master of Science in Data Science, GPA: 3.45 — ***Expected May 2026***
Relevant Coursework: Probability, Statistics, Data Analysis, Data Management, Machine Learning, Big Data Analysis, Cloud Computing.

Savitribai Phule Pune University — Pune, India
Bachelor of Engineering in Information Technology, GPA: 4.00 — ***August 2016 – May 2020***

TECHNICAL SKILLS

- **Programming Languages**: Python, MySQL, MongoDB, PL/SQL, R, C, C++, Java, HTML, CSS.
- **Libraries & Frameworks**: Numpy, Pandas, Matplotlib, Seaborn, scikit-learn, Tensorflow, Flask.
- **Tools**: Jupyter Notebook, Visual Studio Code, Eclipse, PowerBI, Tableau, Microsoft Excel, SQL ServerManagementStudio, Postgre SQL, Google Cloud Platform (GCP), Azure, GitHub, Microsoft Endpoint Configuration Manager (SCCM), Qualys, Aternity, ServiceNow, Jira.

WORK EXPERIENCE

Tata Consultancy Services — Pune, India
System Analyst — ***August 2020 – April 2024***

- Collaborated with the Vulnerability Management team, effectively analyzed & resolved security vulnerabilities for 55,000 traditionally managed systems, imported from the Qualys cloud-based security platform into Jira.
- Led an agile team of 8 in data cleansing & transformation with Excel, Python, & PostgreSQL, demonstrating integrity & professionalism while achieving high data quality, reducing SQL query execution times by 30 minutes, & significantly enhancing Data Lake performance.
- Conducted regression analysis on security vulnerability trends & incident response efficiency using Python & SQL, leading to a 15% reduction in security risks & a 35% increase in stakeholder satisfaction through advanced Tableau dashboards.
- Employed DAX to create calculated fields & measures for analyzing key metrices like Common Vulnerability Scoring System (CVSS) score, threat intelligence, exploitability, risk levels, remediation timelines & actions taken, deployment status, compliance rates, within Aternity-digital experience management tool driven Vulnerability Analysis Dashboard.
- Designed & deployed technical solutions using Microsoft Endpoint Configuration Manager (SCCM), on vulnerabilities related to Microsoft Windows Operating System, MS Office updates & other applications to remediate it making devices risk free & achieving 99% compliance.
- Enhanced SCCM configurations by implementing custom client settings, boundary groups, & distribution points to optimize delivery speed & efficiency, also automated repetitive tasks using PowerShell scripting improving productivity by 25% & reducing manual efforts.
- Provided dependable IT support, proactively responding client queries, via ITIL framework-based processes like Incident, Change, Service Request Management using ServiceNow, working in Service Operation phase.
- Built queries and fetched reports from SQL Server 2012 R2 Management Studio as per client requirement.

Zensar Technologies — Pune, India
Software Engineer Intern — ***May 2019 – June 2019***

- Designed & implemented backend logic of an application for local school using Core Java, handling school records like student personalinformation, academic, administrative records, community & activity logs, library & resource usage. Integrated Java with JDBC to interact with the database, ensuring seamless data flow & improved application performance. Utilized Hibernate ORM for object-relational mapping to simplify database interactions & improve code maintainability.

PROJECT EXPERIENCE

Student Exam Performance Prediction | Machine Learning, Python, Numpy, Pandas, Scikit-learn, HTML, CSS, Flask

- Developed & implemented Machine Learning project, designed an interactive web application using Flask, HTML, & CSS allowing users to input features for new student & predict Math's score.
- Built & optimized data loading, preprocessing & transformation pipelines, incorporating one-hot encoding for categorical features.
- Trained multiple ML models, including Random Forest, XGBoost, CatBoost, Gradient Boosting, AdaBoost, Decision Tree, & Linear Regression, evaluated these models based on R2 score for best-performing model selection for robust predictions.
- Performed hyperparameter tuning using GridSearchCV to enhance model accuracy to 86.8% & generalization.

Adult Census Income Prediction | Python, Pandas, Matplotlib, Seaborn, Scikit-learn, Numpy, Machine Learning

- Developed a supervised machine learning pipeline to predict whether an individual's income exceeds $50K/year using the UCI Adult Census dataset.
- Implemented AIC-based forward feature selection to optimize model performance with minimal features, trained & compared multiple classifiers including Logistic Regression, KNN, Decision Tree, Random Forest, XGBoost, AdaBoost, & Gradient Boosting.
- Evaluated models using cross-validation, confusion matrix, sensitivity/specificity, AUC-ROC curves, & accuracy score, concluding Random Forest as the best model with a 92.75% test accuracy and the highest AUC score.

Swiggy Funnel Analysis and Conversion Insights | Data Analysis, PowerBI, DAX, Problem Solving

- Developed an interactive dashboard using MS PowerBI, to conduct funnel analysis for Swiggy, leading e-commerce platform for online food ordering in India, cleaned & transformed data by handling missing values, employed DAX to create calculated fields & measures.
- Conducted a detailed funnel analysis, focusing on session metrics, traffic sources, & conversion rates. Identified fluctuations in order volumes, traffic, & conversion metrics (L2M, M2C, C2P, P2O) compared to historical data. Created dynamic dashboards & visualizations to highlight key trends, identified dates with significant changes, and developed data-driven hypotheses to explain performance variations.

AirlineDB SQL Query Analysis | Database Management System, SQL Joins, Window function, Case Statements

- Analyzed airline operations using SQL to retrieve complex insights on flights, airports, and passenger data.
- Analyzed sequential flight data by writing SQL queries with joins, window functions, and CASE statements to dynamically categorize flights, rank routes based on demand and occupancy, and achieve 95% analysis accuracy.