# Rohit Akole, MSTM

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Aspiring data enthusiast with a strong foundation in Data Science methodologies. Proficiency in programming, machine learning, statistical analysis, and data visualization. Ability to tackle complex data challenges with a focus on harnessing the power of data to drive innovation, make informed decisions, and contribute to the development of data-driven solutions that align and positively support business goals and performance.

#### **EDUCATION**

| University of Connecticut, School of Business – Hartford, CT                                | May 2025 |
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| Master of Science in Business Analytics and Project Management, Concentration: Data Science | Ž        |
| University of Bridgeport, School of Engineering – Bridgeport, CT                            | May 2019 |
| Master of Science in Technology Management, Concentration: IT and Big Data                  |          |
| North Maharashtra University, School of Management – Jalgaon, India                         | May 2015 |
| Bachelor of Business Management, Concentration: E-Commerce                                  |          |

#### TECHNICAL SKILLS

Programming: Python, SQL, R Programming, Machine Learning, Django

**Tools:** PyCharm, Jupyter Notebook, Tableau, SAS Studio, PowerBI, ESP Scheduler, RStudio, SSIS, SSMS, MS Visio, GitHub, MS Excel, MS Access, Google Data Studio, Google DataPrep, SAS JMP, Office 365, Figma (UI Tool)

# PROJECT EXPERIENCE

# **Insurance Fraud Detection Using Machine Learning**

- Engineered and tested multiple machine learning models (Logistic Regression, Decision Tree, Random Forest) to detect insurance fraud, achieving a precision of 92% and a recall of 88%.
- Preprocessed and analyzed 50,000+ insurance claims data, performing feature selection and extraction which improved model accuracy by 15%.
- Implemented the final Random Forest model with hyperparameter tuning, reducing false positives by 20% and overall fraud detection rate by 25%, leading to a projected annual savings of \$500,000.

# Sentiment Analysis of 2020 US Presidential Election Tweets

- Conducted sentiment analysis on over 1 million tweets related to the 2020 US Presidential Election using SAS Enterprise Miner, employing advanced natural language processing (NLP) techniques.
- Developed and optimized machine learning models (Logistic Regression, Decision Tree, Random Forest) in SAS Enterprise Miner to classify tweet sentiments, achieving an accuracy of 89% and an F1-score of 0.85.
- Analyzed and visualized sentiment trends over time, identifying key shifts in public opinion during debates and major campaign events, using SAS visualization tools.
- Created comprehensive reports and dashboards in SAS to present sentiment analysis results, enhancing data-driven decision-making for stakeholders by providing real-time insights.

# Health Insurance Marketplace Data Analysis and Report Automation

- Executed data transformation via SSMS, integrating and cleaning data from various sources to create a consolidated dataset of 400,000+ records. Remedied 95% of null values with defaults, boosting data quality and accuracy.
- Engineered a Python script cutting down report generation time from 60 minutes to under 2 minutes (97% timesaving). Exported data directly from SQL to an Excel file. Revamped column width, and added filter options to all columns, and replaced empty columns with 0 in the Pivot table for revised data presentation and analysis.
- Leveraged Pandas, Openpyxl, Xlsxwriter, PyODBC, and SOLAlchemy, diminishing manual labor by 95%.
- Yielded annual time savings of over 500 hours and improved data accuracy.

### **PUBLICATIONS**

- Rohit Vikas Akole (2021); Operation and Significance of Supply Chain Management (SCM) in Business; International Journal of Scientific and Research Publications (IJSRP) 11(6) (ISSN: 2250-3153).
- Akole, R. V. (2019) Problems and Solutions for Project Management Information Systems. International Journal of Science and Engineering Investigations (IJSEI), 8(87), 80-85.

### **CERTIFICATIONS**

- IBM Data Science, a 9-course professional certification by IBM on Coursera.
- IBM Data Analyst, a 9-course professional certification by IBM on Coursera.
- Advanced Google Analytics.
- Google Analytics for Power Users.