Aditya Dube

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EDUCATION:

Master of Science in Data Science and Analytics	Dec 2024
Grand Valley State University, Grand Rapids, MI	GPA: 3.82
Bachelor of Technology in Computer Science and Engineering	Jun 2021
Jaypee University of Engineering and Technology, Guna, India	GPA: 3.36

TECHNICAL SKILLS:

- Programming Languages & Data Science: Python, R, SQL, Statistical Analysis, SAS, Data Cleaning and Transformation, Data Analysis, Predictive Modeling and Forecasting, Advanced Machine Learning Techniques.
- Machine Learning & Deep Learning: TensorFlow, Keras, PyTorch, Reinforcement Learning, Scikit-Learn
- Database Management & Version Control: MySQL, MongoDB, Git.
- Data Visualization: Matplotlib, Plotly, Tableau, Power BI
- Natural Language Processing: SpaCy, NLTK, Text Mining, Sentiment Analysis, Transformers
- Cloud Platforms: AWS, Microsoft Azure, GCP, Snowflake

PROFESSIONAL EXPERIENCE:

Revenue Cycle Intern – Corewell Health, Grand Rapids, MI

- Analyze financial data across over 3000 patient accounts monthly to enhance billing processes and support revenue cycle improvements.
- Collaborate with a team of 10+ healthcare finance professionals to develop and refine performance metrics and ensure compliance with healthcare regulations.
- Implement and optimize new revenue management systems, including sFTP management and KPI dashboards, improving data processing efficiency by 20%.
- Conduct detailed data audits and normalization for approximately 5000 transactions per month to ensure accuracy and efficiency in revenue reporting.
- Develop and maintain a Tableau scorecard dashboard that tracks key performance indicators for 50+ financial metrics, enhancing decision-making and operational transparency.

Graduate Research Assistant – Grand Valley State University, Allendale, MI

- Conducted comprehensive analyses of firm-level trust scores over time, utilizing statistical models to uncover key trends, while incorporating familiarity as a covariate to reveal significant broader market impacts.
- Led research on how fair evaluations and economic differences affect education, using NLP and ML to analyze biases in teacher evaluations, contributing to actionable solutions.
- Created a project to summarize large documents by 20%, improving research team efficiency in data comprehension.
- Applied two-way interaction models to analyze trust score variations across firms and years, identifying top-performing firms and delivering actionable insights for trust-building strategies.
- Organized and analyzed large datasets using Python, streamlining research for a 5-person team and ensuring accuracy for critical studies.

Resident Assistant – Grand Valley State University, Allendale, MI

- Cultivated a safe, inclusive community for over 45 residents, leading to a 25% boost in positive feedback, demonstrating strong team collaboration and decision-making skills.
- Streamlined administrative and maintenance reporting processes, achieving a 20% faster response time, showcasing effective • decision-making and continuous learning.
- Collaborated with staff and other Resident Assistants to enact three significant policy changes, enhancing student satisfaction, and living experiences, reflecting strong verbal and written communication skills.
- Provided effective peer counseling and conflict resolution, reducing dormitory incidents by 30% and improving student well-being, highlighting continuous learning and strong communication abilities.

Programmer Analyst Trainee – Cognizant Technology Solutions, Hyderabad, India

- Managed and completed over 500 database operations using MySQL, ensuring project delivery within 90% of the allocated timeframes.
- Optimized database design and efficiency, achieving a 20% improvement in data retrieval speed and processing.
- Led comprehensive functional, regression, and integration testing, securing a 95% defect detection rate and minimizing postdeployment issues.
- Collaborated on defect reviews, successfully resolving 80% of issues and boosting software reliability by 25%.
- Designed and implemented 200+ test cases, expanding test coverage by 30% and aligning with business requirements.

ACADEMIC PROJECTS:

Analyze Solar Project Development to inform Business Expansion [SQL and Tableau]:

Analyzed Interconnection Queue data using SQL and Tableau to identify strategic markets for Ampion's expansion, enhancing data-driven decision-making for renewable energy growth strategies.

Mental Health Treatment Prediction [Python and Machine Learning]:

Led a project to predict when people need mental health care, reaching over 80% accuracy. Managed data cleanup applied algorithms like Decision Trees and Boosting in Python, and validated models to ensure reliability. Enhanced early treatment strategies, improving patient support.

Fast Food Restaurant [R Studio]:

Jun 2023 - Aug 2023 Initiated and led a data analysis project to scrutinize US fast-food restaurant trends, employing R with US Census data. Successfully applied Monte Carlo simulations and bootstrap inference, integrating complex data to derive key insights. The analysis illuminated critical socioeconomic correlations, furnishing data-driven strategies for the fast-food industry.

Machine Learning in Predicting Patient Costs [R Studio]:

Initiated a project to predict healthcare costs using machine learning, focusing on Medicare data, including patient demographics and medical history. Designed and developed Linear Regression, Classification and Regression Tree and Feedforward ANN model, employing advanced algorithms to ensure high accuracy, demonstrated by key metrics like RMSE and R-squared. The model's insights supported healthcare strategies, enhancing the efficiency of cost predictions.

Oct 2023 - Dec 2024

May 2024 – Aug 2024

Aug 2023 – Dec 2024

Feb 2021 – Jul 2022

Jan 2024 – Apr 2024

Jan 2023 – Apr 2023

Jul 2024 – Sep 2024

CERTIFICATIONS:

- Aug 2024 Data Analytics Badge - Graduate ٠ PCED - Certified Entry Level Data Analyst with Python Jul 2024 • HFMA – Certified Healthcare Financial Professional (CHFP) ٠ May 2024 • HFMA – Certified Specialist Business Intelligence (CSBI) May 2024 HFMA – Certified Revenue Cycle Representative (CRCR) PCEP – Certified Entry Level Python Programmer . May 2024 • • Apr 2024 SAS 9.4 Programming Fundamentals Mar 2024 Data Mining Fundamentals Badge – Graduate Information Visualization Fundamentals Badge – Graduate Dec 2023 • Dec 2023 • Object-Oriented Programming Fundamentals Badge - Graduate Dec 2023 • SQL Intermediate (HackerRank) May 2021 • Infosys Certified Software Programmer Jun 2020 • ACHIEVEMENTS:
 - Published my book "Whispers of the Wounded Soul" Published my book "The Love That Frightens Me"
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Aug 2023 May 2022