Anand Raj

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EDUCATION

Master of Science, **Data Science -** The George Washington University *May 2025 (Expected)*
Relevant Courses: Data Warehousing, Data Science, Data Mining, Machine Learning, Algorithms GPA: 4.00

Bachelor of Engineering, **Electrical and Electronics -** RNS Institute of Technology *Sep 2021*
Relevant Coursework: Data Structures, Mathematics, Object Oriented Programming Using C++, Python Programming

TECHNICAL SKILLS

Programming languages: R, Python, and C.
Database: SQL, MongoDB, and Neo4j (Graph Database).
Machine Learning Algorithms: Linear/Logistic/Lasso/Ridge Regression, Decision Trees, Naive Bayes, KNN, Random Forest, Stacking, SVM, XGBM, Bagging Methods, Cascading Classifiers.
Data Mining: PCA, t-SNE, Recommendation Systems & Matrix Factorization, and K Means, Hierarchical, DBSCAN.
Time Series Analysis/Forecasting: AR, ARMA, ARIMA, and SARIMA.
Deep Learning: Artificial Neural Networks and Convolutional Neural Networks.
Product Development: Agile Methodology, Product Life Cycle, JIRA for Ticketing, Git, GitHub.
Others: Tableau, Flask, AWS EC-2, Streamlit, Heroku, TensorFlow and Keras.

PROJECTS

Ezflow.ai *Ongoing*
- Leading the development of EzFlow.ai, a user-friendly platform designed to empower users with no coding experience to learn and implement machine learning projects. By automating data preprocessing, model training, and result visualization, EzFlow.ai provides users with predictions and comprehensive summary reports.

Quora Question Pair Similarity *Jan 2024*
- Applied Natural Language Processing techniques to determine if two questions have similar meaning.
- Performed comprehensive data analysis, feature engineering, and text data featurization to develop a predictive model.

New York City Taxi Trip Duration Prediction *Dec 2023*
- Developed a model for predicting trip duration using New York City pick-up and drop-off coordinates, involving extensive data cleaning, analysis, and training various ML models, achieving the lowest RMSE of 224 seconds.

Sentiment Prediction from Amazon Reviews *Sep 2023*
- Developed a model to predict if a text review of a product given by user is positive or negative.
- Performed extensive text cleaning and featurizing text data, achieved an AUC score of 0.90 using SGD Classifier.
- Deployed using Flask on AWS EC-2 virtual machine. Link to website:

RESEARCH PUBLICATIONS

Facial Feature Extraction and Emotional Analysis Using ML. *Jan 2023*
Performance Comparison of Prediction Algorithms for Forecasting of Wind Power Generation *Sep 2022*

WORK EXPERIENCE

Technical Writer, TowardsAI & Stackademic *Dec 2023 - Present*
Authored engaging technical blogs focused on Artificial Intelligence and Autonomous Cars.

Software Engineer, **Continental AG.** *Sep 2021 - Aug 2023*
- Worked on Advanced Driving Assistance Systems and developed products like Emergency Brake Assist, and Rear Pre-Crash Predict. Major products: Volkswagen ID Buzz and Mercedes Benz Sprinter Van.
- Developed algorithm using C. Implemented automation using Python scripting.
- Provided problem-solving solutions to customer-reported problems in the simulation environment.
- Delivered better performance with just 2 false positives per 10,000 kilometers, optimizing key performance indicators.

Data Science Intern, **Innodatatics** *Jun – Aug 2020*
- Collaborated with a dynamic team to conduct in-depth data analysis utilizing Python and Tableau, providing valuable insights into client's sales data. Analyzed user behavior, temporal trends, and distinctions between free and paid users.
- Formulated data-driven recommendations and compelling narratives and communicated to our client.

Intern, **Defense Research Development Organization** *Jan - Feb 2020*
- Worked on validation and verification process standards in avionics hardware.
- Collaborating with different teams and reviewing standards of all the validation and verification processes.

CERTIFICATIONS

- Machine Learning Certification by Continental Autonomous Mobility, 2022.
- Data Fusion in Autonomous Driving using Deep Learning by Continental Autonomous Mobility,2022.