Anand Raj

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Domain Skills: Data Science, Machine learning, Deep Learning, Natural Language Processing, Software Engineering

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

Scholarship Received: Global Leaders Award

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

Languages and Databases: R, Python, C, SQL, MongoDB, and Neo4j (Graph Database)

Libraries: NumPy, Pandas, Matplotlib, Seaborn, Sklearn, Folium, Plotly, Keras, TensorFlow, OpenCV

Product Development: Agile Methodology, Product Life Cycle, Jira, Confluence, Git, GitHub

Others: Tableau, Flask, Dash, AWS EC-2

WORK EXPERIENCE

Technical Writer, TowardsAI, (Remote)

Dec 2023 - Present

Authored engaging technical blogs focused on Artificial Intelligence and Autonomous Cars. (Medium Account)

Software Engineer, Continental AG, India

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 and testing using GTest.
- Provided problem-solving solutions to customer-reported problems in the simulation environment.
- Delivered better performance with just 2 false positives per 10,000 kms, optimizing key performance indicators (KPIs).

Data Science Intern, Innodatatics, India

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, India

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.

PROJECTS

Steering Angle Prediction

Ongoing

- Implemented an end-to-end self-driving system using Convolutional Neural Networks (CNNs) with TensorFlow, steering a car directly from raw pixel data captured by a front-facing camera.
- This innovative approach eliminates the need for manual decomposition or semantic abstraction, streamlining the development process.
- Leveraging tools such as TensorFlow, scipy, and OpenCV, the project achieves robust performance with minimal human-labeled training data, marking a significant advancement in autonomous vehicle technology.

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.

Artificial Music Generator

March 2024

• Implemented an AI-driven music generation model utilizing LSTM neural networks in Python with TensorFlow, capable of predicting ABC notations for piano compositions.

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, (IJARESM).

Ian 2023

Performance Comparison of Prediction Algorithms for Forecasting of Wind Power Generation, (IEEE).

Sep 2022

CERTIFICATIONS

• Machine Learning Certification by Continental Autonomous Mobility, 2022.