Aditya Pradeep Waghmode

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EDUCATION

Florida Atlantic University — Boca Raton, FL
Master of Data Science and Analytics — *August 2023- May 2024*

SRM Institute of Science & Technology — Chennai, Tamil Nadu
B. Tech in Mechanical Engineering — *July 2016 – May 2020*

Relevant Coursework

Graduate Level

Introduction to Data Science | Deep Learning | Data Mining & Predictive Analytics | Artificial Intelligence | Data Mining & Machine Learning | Information Retrieval

Undergraduate Level

Calculus and solid geometry | Advance Calculus and complex analysis | Fourier series partial differential equation & their application | Calculus of variation and non-linear programming | Probability and Statistics | Numerical Method

Certificate

The data science course 2022: complete data science bootcamp : Introduction to data Science, Probability, Statistics, Python, Advance Statistical methods in python, Mathematics, Deep Learning.

Technical Skills

Languages: Python | SQL | R | HTML(Basic)

Software: Jupyter Notebook | PyCharm | Sql Developer (Oracle) | WinSql | MySql | Informatica Power Center | CA Workload (Autosys) | Git | Jenkins | PostgreSQL | MS Office | Excel | PowerBI | Tableau | Catia | AutoCAD | Anaconda

Libraries: Matplotlib | Pandas | NumPy | Scikit-learn | Tensorflow | keras | plotly | PyTorch | ggplot2 | NLTK | BeautifulSoup

Work Experience

Systems Engineer
Infosys Limited — *May-2021 to August-2023*

1. Developed mapping and workflows to facilitate seamless migration of tables between databases, employing Oracle and Informatica technologies.
2. Managed the migration of jobs from Informatica to Python by spearheading the development of Python scripts. These scripts effectively converted and transferred Informatica-held data, ensuring seamless transition and continuity of operations.
3. Led migration efforts from Greenplum version 4 to version 6, focusing on the development of SQL scripts to ensure the safe transfer of data while maintaining data integrity.

Academic Projects

1.Data mining and machine learning:

Project 1 Engineered and implemented both linear regression and logistic regression models exclusively using mathematical principles. For linear regression, I developed models ranging from simple 1st order to complex 10th order polynomials. Similarly, for logistic regression, I crafted models for 1st and 2nd order polynomials, ensuring accurate prediction of outcomes through mathematical rigor.

Project 2 Implemented a single-layer perceptron to predict single digits from the digit's dataset, analyzing the weight structure for each digit. Additionally, developed a multi-layer neural network as a classification model to accurately predict each digit in the dataset.

Tools used: Google Colab, Numpy and matplotlib.

2. Forward-Forward pass algorithm (Research): Implemented Geoffrey Hinton's forward-forward pass algorithm to simulate the transfer of data through synapses in the central nervous system via neurons, akin to the workings of the cortex. Applied this algorithm to the MNIST dataset to effectively process and analyze handwritten digits for classification tasks. *Tools used: Google Colab, Jupyter, Tensorflow, NumPy, pandas, Pytorch.*

3. Deep learning: Developed a Convolutional Neural Network (CNN) model for image classification, specifically designed to predict objects and living beings in colored images, such as ships, trucks, deer, frogs, etc., utilizing the CIFAR-10. *Tool used: Keras, Colab, NumPy, matplotlib.*

4.Data mining and predictive analysis: Implemented predictive models for distinguishing between red and white wine utilizing Random Forest Classifier and Logistic Regression algorithms. Additionally, developed models to classify the quality of wine using Gradient Boosting Classifier and Support Vector Machine algorithms. *Tools used: Pandas, Scikit-learn, seaborn, matplotlib, Colab.*

5.Introduction to data science: Executed four distinct projects to explore data through visualization, principal component analysis, and statistical analysis. Employed R programming language and utilized packages including tidyverse, dplyr, skimr, tidyr, and ggplot2 for comprehensive data analysis. Implemented models for linear and logistic regression to derive insights from the data.