Ajith Kumar Ethirajulu

44 Heath St., Buffalo, NY 14214 / 716-256-4115 / aethiraj@buffalo.edu
LinkedIn • GitHub • Portfolio



EDUCATION

University at Buffalo, The State University of New York

Master of Science – Data Science GPA 3.58

Buffalo, NY Expected Jan 2024

Summer Research Project - Leveraging AlphaFold Protein Structure Prediction for Drug Development

EXPERIENCE

Fractal Analytics
Data Engineer

Bengaluru, KA, India July 2021 – April 2022

- Developed one-stop solution for transforming and storing logistics data using Python and Azure Functions.
- Implemented Azure Functions to capture and transform streaming data from Azure Event Hub and stored the transformed data on Azure Cosmos DB using MongoDB API.

Infosys Limited Senior Systems Engineer Chennai, TN, India

April 2018 – July 2021

- Managed and maintained trade store applications and master databases for a banking client, ensuring data integrity and optimizing database performance on Oracle and Unix platforms.
- Leveraged various monitoring and scheduling tools including Autosys, Geneos, and ServiceNow to track system performance, schedule jobs, and ensure service level agreements (SLAs) were met.
- Developed and implemented a procedural SQL script that automated multiple manual tasks, significantly reducing the time taken to resolve critical data compatibility issues by 25 minutes.
- Infosys Certified in MySQL, Power BI, Tableau and Talend Open Studio for Data Integration. Also secured 93% in the Infosys training program on Python, RDBMS, and Software Engineering.

PROJECTS

Skin Melanoma Prediction

2022

- Predicted probability of a given image being skin cancer (melanoma). Used Convolutional Neural Network to build a binary classification model, trained and validated using dataset containing about 33000 images.
- Achieved 92% accuracy using a 3-hidden layer base model and achieved 94% accuracy using EfficientNetB4 transfer learning model. Deployed web app using python flask and html to upload a picture and make predictions.

Credit Defaulter Analysis and Prediction

2022

- Utilized SQLite and Python to store and analyze vast data containing 120 features and 1.2 million records.
- Built binary classification machine learning model using Support Vector Machines, RandomForest and Tensorflow (Keras). Highest accuracy obtained 91%. Deployed Python flask app to enter customer data and provide model's predictions.

Online Retail Sales Analysis using Power BI

2021

• Analyzed sales data using Power BI, developed detailed Power BI report with appealing visualizations, utilizing DAX for calculated measures and custom columns, and identified trends, patterns, and insights for data-driven decision-making using KPIs.

Analysis of Loan Defaulters - Tableau

2021

• Created a Tableau dashboard with visualizations that presented clear indications of factors related to loan defaulters, providing valuable insights for business decision-makers.

Skills:

Programming: Python, R, SQL, MATLAB, Machine Learning, Deep Learning, Reinforcement Learning

Databases: MySQL, SQLite, Postgres SQL, Data Warehousing

Data Engineering: Pyspark, ETL, HDFS

Cloud: Azure Data Factory, Azure Databricks, Azure Data lakes

Visualization: Tableau, Power BI, Seaborn, Matplotlib

Certifications:

- PG Certification in Business Analytics and Data Science | SSN SACE | Chennai, India | Aug 2021 | CGPA: 9.3
- Microsoft Certified Azure Data Engineer Associate | September 2021 (Expires September 2023).

Achievements: INSTA Award, Infosys Limited, July 2020 – For exhibiting excellent teamwork and taking up additional responsibilities for the team's success.