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Description automatically generated**Ajith Kumar Ethirajulu**

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[LinkedIn](https://www.linkedin.com/in/aje2907) • [GitHub](https://github.com/aje2907) • [Portfolio](https://aje2907.github.io/)

**EDUCATION**

**University at Buffalo, The State University of New York** Buffalo, NY

Master of Science – Data ScienceExpected Jan 2024

GPA 3.58

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

**EXPERIENCE**

**Fractal Analytics** Bengaluru, KA, India

**Data Engineer** 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** Chennai, TN, India

# Senior Systems Engineer 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.