Maithri Amarnath Vijayakumari

Sherbrooke, QC | +1 (819) 919-6362 | my3amarnath7@gmail.com

LinkedIn | GitHub | Website

SUMMARY

Process-oriented data analyst with 3 years of experience in optimizing semiconductor manufacturing processes by collecting process data, filtering and identifying patterns from data sets, and generating various types of statistical figures to analyze and turn data into useful insights. I am also an experienced Java Developer in developing PLM applications for 3 years.

TECHNICAL KNOWLEDGE

Programming Languages:	Python, R, SQL, Java
Libraries/Frameworks:	BeautifulSoup, Requests, NLTK, Seaborn, Sci-kit, Keras, TensorFlow, Spark, Hadoop
Databases:	MySQL, PostgreSQL, SQL Path Finder
Tools/Technologies:	Advanced JMP, JSL, Power BI, Tableau
Machine Learning Algorithms:	Linear Regression, Logistic regression, SVM, K-Means, Random Forest, CNN, RNN, LSTM, Deep Neural Networks, Ensemble Learning, Clustering.

PROFESSIONAL EXPERIENCE

INTEL, Leixlip, Ireland *October 2020 – November 2023*

Process Data Analyst

- Participated as part of an Engineering team to deliver world class performance on critical success indicators (Safety, Quality, Output & Equipment performance) in a highly automated wafer fabrication facility.
- Developed solutions to problems utilizing statistical knowledge, machine learning algorithms and problem-solving tools as well as developing strategies to prevent the recurrence of the problem in future.
- Used data models, data extraction, data mining & data analysis skills to identify trends/outliers to reduce process variation & drive corrective action plans.
- Experienced in SQL, Python and advanced data manipulation techniques to clean, transform, and prepare data for modelling.
- Provided data insights, constraining data visualizations and actionable insights to improve module performance.
- Demonstrated Strong analytical & problem-solving skills, team dynamics / ability to work as part of a high performing team.
- Partnered with 24*7 technician team to troubleshoot equipment & process issues to facilitate sustaining operations.
- Driving continuous improvement on process & equipment operational indicators to support our future customer demand.
- Demonstrating ability to deal with ambiguity in defining activities and direction, good planning & organization skills, and Excellent communication skills.

ITC Infotech India Ltd, Bengaluru, India *July 2016 – August 2019*

PLM Developer

- Part of Support and Change Request Development team and interact with clients to understand new business requirements and develop optimized solutions.
- Develop Server Side/Client-Side codes, testing and deployment using Java, JSP and JavaScript on Windows Server environment.
- Interaction with Client Infrastructure team towards Database Server management.
- Worked on APACHE TOMCAT installation, configuration, and load balancer management.
- Extensive experience in development, debugging and testing on Windows.
- Experienced in Software Development Life Cycle models for development and support functions.

EDUCATIONAL QUALIFICATION

MS, Data Science & Analytics *September 2019 – August 2020*

National University of Ireland Maynooth, Ireland

BE, Electronics & Communication Engineering *June 2011 – June 2015*

Visvesvaraya Technological University Bengaluru, India

PROJECTS

Standardized Water Level Index Reconstruction, Maynooth University *May 2020 – August 2020*

As part of Master's academic project, built a predictive model for Standardized water level index using salt-marsh foraminifera as key predictive variable.

- Clustering methods (K-means, Hierarchical clustering) or grouping using PCA were used to explore the impact of minimizing the number of foraminifera spices variables. This helped to understand the relationship between grouped species and tidal elevation.
- A comparison was carried out on prediction model results developed with Random Forest on clustered and non-clustered data.

SpaceX Falcon 9 first stage Landing Prediction,

IBM Capstone Data Science project that predicts the success rate of landing SpaceX's Falcon 9 first stage by training a machine learning model and use public information to predict if SpaceX will reuse the first stage.

- Collected SpaceX data by using SpaceX API and Web scrapping. Performed data wrangling to find some patterns in the data and determine what would be the label for training supervised models.
- Performed exploratory data analysis (EDA) using visualization and SQL.
- Performed interactive visual analytics using Folium and Plotly Dash
- Performed predictive analysis using classification models. By Standardize the data Split into training data and test data we find best Hyperparameter for SVM, Classification Trees and Logistic Regression and also find the method that performs best using test data

Analyzing the Impact of Recession on Automobile Sales,

In this project task is to analyze the historical data of Automobiles and give the company insights on how the sales were affected during times of recession.

- Created a dashboard containing all plots and charts and to provide the directors with the ability to select a particular report or a period of time so they can discuss the data in detail.
- Created some Visualization Outputs using Matplotlib, Seaborn & Folium.

CERTIFICATION

IBM Data Science Specialization
Credential URL

Data Analysis with Python
Credential URL

Data Visualization with Python
Credential URL

Machine Learning with Python (with Honors)
Credential URL

Databases and SQL for Data Science with Python (with Honors)
Credential URL