

Education

BACHELOR'S IN TECHNOLOGY –Amrita Vishwa Vidyapeetham –Coimbatore, TN, India

June 2020

Majors: Machine Learning, Image Processing, and Visualization

MASTER OF COMPUTER SCIENCE –Dalhousie University –Halifax, NS

July 2023

Majors: Data Analytics, Machine Learning, Image Processing, and Visualization

Skills

Data Analysis:

Statistical analysis, data cleaning, transformation, and merging

Data Visualization:

Tableau, Power BI, clear presentation of complex data

Programming:

Python (NumPy, Pandas), R, SQL
HTML, CSS, TensorFlow, MATLAB

Database

Management:

MySQL, Microsoft Access, SQL queries, performance optimization

Data Wrangling:

Collection, cleaning, and transformation of structured and unstructured data

Project Management:

End-to-end execution, requirements gathering, timely delivery

Machine Learning:

Supervised and unsupervised algorithms, model evaluation, and selection

Communication:

Strong verbal and written skills for technical and non-technical audiences

Projects

COMPARATIVE ANALYSIS AND EVALUATION OF TECHNIQUES FOR GENERATING HIGH-QUALITY SYNTHETIC DATA FOR INDUSTRIAL CONTROL SYSTEMS DATASETS.

– Master's Thesis

July 2023

- Conducted an exploratory analysis of the different methods of generating synthetic datasets.
- Performed a comparative study and developed an evaluation framework to assess and analyze the synthetic dataset.
- Perform analysis on the different generation algorithms using Visualizations, Statistics, and other Machine learning Algorithms.

COMPARISON OF ENSEMBLE MODELS USING CONFIDENCE AND AGREEMENT MATRIX.

– Research Project

Dec 2022

- Designed a model to visualize and analyze the internal model performance and predictions of ensemble models using Python.
- Created a Dashboard to visualize the analysis for a more interactive experience using HTML, CSS, and D3.
- The model also determines wrongly classified instances and provides an in-depth analysis of classifications that have been classified with disagreement between the two models.

SENTIMENT ANALYSIS OF PRODUCT REVIEWS

– Course Project

April 2021

- Developed a model to judge how worthy a product is, and provide an automated comparison with other products on the market using Python.
- Further information, if required by the user is provided in the form of a comprehensive report.
- A search algorithm is also implemented to understand public sentiment.

STOCK MARKET PREDICTION AND ANALYSIS

– Course Project

Jan 2021

- Developed a model to provide beginner investors with a model for predicting stock values and trends
- Analyzes the historical stock-price dataset to develop a model to predict the closing price of stocks.
- The model is developed and implemented using Python and Plotly.

DETECTION OF OBSTRUCTIVE SLEEP APNEA USING FACIAL RECOGNITION

– Bachelor's Degree Thesis

May 2020

- Developed an application to identify signs of Sleep Apnea using image processing and facial recognition.
- An interface was created for the ease of use of the user using Python and MATLAB.
- The application was intended as an affordable and efficient method to detect OSA.

VEHICULAR ADHOC NETWORK-BASED CONTROL SYSTEMS FOR SMART TRAFFIC LIGHTS

– Bachelor's Degree Project

Jan 2020

- Developed an application Provide a method of routing information that would provide faster communication within clusters.
- The algorithm was developed using NS2 and SUMO.
- The application was intended as cost saving measure to reduce the time delays in traffic signals.

Work Experience

RESEARCH ASSISTANT – Sure Shot Solutions – HALIFAX, NS

May 2023 – Ongoing

- Conducted an extensive Feasibility Study on automated machinery.
- Developing a feasible methodology to implement automation into cooking conveyer belts using Python
- Performed image processing to analyze the object placed on the conveyer belt and modify the strength of the belt using automation

SOFTWARE DEVELOPER INTERN – GAO Tek – HALIFAX, NS

Sep 2021 - Jan 2022

- Developed a system to transcribe software tutorial videos through web scrapping and beautiful soup and create a report project using Python programming language.
- Supported development, QA, and user experience staff to develop new products.
- Prepared and submitted reports and other documentation to assist development team members.

SOFTWARE ENGINEER TRAINEE – Cisco ThingQbator – COIMBATORE, TN

April 2019 - July 2019

- Shadowed team members to learn new tasks and how to handle technical issues appropriately.
- Wrote clear, clean code for various projects.
- Worked with developers to identify and remove software bugs.
- Developed a system to manage and automate maritime operations on aquamarine vehicles using Arduino and NS3.
- Assisted with creating software programs for maritime automation programs.