Sudhish Subramaniam

subramaniam.su@northeastern.edu | 236-863-4776 | github.com/Sudhish21 | LinkedIn

Technical Skills and Knowledge

- **Frameworks**: Anaconda, Jupyter Notebook, Google Colab, PowerBI
- **Languages**: Python, SQL, Microsoft Excel
- **Python Libraries:** Scikit-learn, Pandas, NumPy, Plotly, Matplotlib, Seaborn
- **Technical skills:** Data Science, Machine Learning, AI
- **Algorithms:** Supervised Learning, Unsupervised Learning, Reinforcement Learning

Professional Experience & Projects

Data Analyst Intern Jan. 2022 – May 2022

Bonrix Software Systems, Gujarat IN

- Manufactured a microcontroller application to detect faces and face points leveraging **OpenCV** and executing two machine learning algorithms namely **Decision Tree algorithm, Random Forest**, ultimately achieved maximum accuracy of 91%
- Partnered with two major clients for preferences and modifications specific to product and executed client requirements accordingly

Data Insights Intern Jul. 2021 - Aug. 2021

NITK-STEP, Karnataka IN

- Assessed current and past five-year stock rates of companies from Bombay Stock Exchange in **Power BI dashboards**, **functions** and **Python** administering data management skills such as **MySQL, Numpy and Sklearn**
- Mapped previous and current stock rates leveraging **Decision Tree Algorithm** and **Random Forest algorithm** to predict future stock rates with 90% accuracy

Artificial Intelligence Intern Jun. 2020 - Jul. 2020

Hawkscode, Rajasthan, IN

- Spearheaded COVID-era challenges for credit card firms, predicting attrition and optimizing credit limits with advanced analytics
- Navigated intricate project dynamics, fostering communication for peak outcomes with team and stakeholders
- Harnessed a dynamic skill set, mastering data-driven decisions, **Logistic Regression**, **linear regression**, and credit industry dynamics for enhanced customer retention strategies

Artificial Intelligence Intern Mar. 2020 - Apr. 2020

ICT Kanpur, Uttar Pradesh, IN

- Inspected machine learning algorithms such as **Support Vector Machine**, **Decision Tree algorithm and Random Forest Algorithm**
- Evaluated titanic survivors data in python by applying data mining techniques such as **Sklearn**, **matplotlib** and **pandas** to explore trends among survivors in terms of gender, class, age, and location in ship
- Predicted if a person would have survived titanic tragedy using **Decision Tree Algorithm** with maximum accuracy of 92% accuracy

Projects

Worldwide Labour Migration Analysis using LinkedIn Data 2023

- Analyzed and visualized labour migration in the world based on home country, target country, industry, and skills of people in **Python**
- Evaluated in-bound and outbound trends in net migration of 180 countries in the world to analyze country-wise labour market
- Effectively led a team of five in conducting meticulous model testing, yielding comprehensive findings that enabled in-depth analysis and the generation of valuable insights, showcasing strong leadership and communication skills

Multipurpose IOT-Based Camera Using Deep Learning 2022

- Developed a robust model using **OpenCV** and **Machine Learning**, achieving 91% accuracy in detecting masks, eyes, eyeball status, and head pose for individuals with or without masks
- Executed a market expansion plan to deploy the model in diverse settings, including online and offline proctored exams, classrooms, and driver monitoring systems, to assess attentiveness

Publications

FetchZo: Real-Time Mobile Application for Shopping in Covid 2020

- Pioneered a model for shopping purposes in COVID-19 pandemic situation to locate nearest shop by **K-means clustering** to cluster shops having specific items, with 90% accuracy, and give an update on current number of people present in shop leveraging **OpenCV**
- Demonstrated app and presented model at International Conference on Sustainable Communication Networks and Applications, **ICSCN**, **2020**

Automatic and Multi-Dimensional Pipe Cleaning Bot for Covid 2020

- Fabricated a robot to cleanse inner sides of different diameter pipes automatically with one operator during COVID 19 situation
- Implemented **OpenCV** and **Random Forest Algorithm** to detect and predict dirt areas of pipes where human hands cannot reach with 91% accuracy

Education

Master of Science in Data Analytics Engineering Dec. 2023
Northeastern University, Vancouver, BC

- CGPA of 3.84/4.00

Bachelor of Technology in Electronics and Communication Engineering May. 2022
Vellore Institute of Technology, Vellore, Tamil Nadu, IN

- CGPA of 3.58/4.00
- Awarded Merit Certificate for Academic Excellence 2019 - 2020

Competitions

Responsible AI Symposium at Northeastern University, Vancouver 2023

- Achieved award an at the Responsible Artificial Intelligence Symposium 2023, surpassing 40 other contenders, through my extensive research and dedication to harnessing Responsible AI's potential to improve healthcare

Chai Time Hack 2022

- Secured first position as a team, developing a robust application for detecting store occupancy during the COVID-19 hackathon leveraging **Python**, **Bluetooth**