**Sudhish Subramaniam**

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**Technical Skills and Knowledge**

* **Framework**s: 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**](https://link.springer.com/chapter/10.1007/978-981-15-8677-4_17)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**](https://www.isdesr.org/special-issue/)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**