RUPSA CHAKRABORTY

+1 8484371600 | rupsachakraborty2622@gmail.com | Piscataway,NJ |www.linkedin.com/in/rupsa-chakraborty25

EDUCATION

Rutgers University—New Brunswick, New Jersey, US **Sep 2021 - May 2023**
Master of Science in Computer Science
Relevant Courses: Artificial Intelligence, Linear Algebra & Optimization, Data Structures and Algorithms, Machine Learning,Database Management,Data Interaction and Visual Analytics

Vellore Institute of Technology, Chennai, India **Aug 2015 - Apr 2019**
Bachelor of Technology in Computer Science and Engineering
Relevant Courses: Data structures and Algorithms, Database Management Systems, Artificial Intelligence, Data Visualization, Image Processing, Machine Learning, Statistics, Linear Algebra.

SOFTWARE SKILLS

Programming: Python,Javascript,Scala,C++, HTML,CSS,jQuery,Shell Scripting
Database:MySQL,MongoDB
Cloud Services: AWS Redshift,S3,EC2
Tools: Airflow,Spark,Kafka, Tableau
Libraries & Frameworks: NumPy, Pandas, Scikit-learn, NLTK, TensorFlow,Pytorch, Seaborn, Matplotlib, D3.js

PROFESSIONAL EXPERIENCE

Phenom People Private Limited | *Product Development Engineer -1* **Feb 2021 - Jul 2021**
- Built data pipelines by developing ETL scripts using python and Sql, to source and transform the data.
- Designed and implemented scripts to automate data validations and report generation to reduce manual effort. This enabled a reduction of man hours required for data validations by 20%.
- Took charge for creation of end to end data pipeline flow for a poc, completing ideation to execution in 2 weeks time.
- Conducted code reviews and ensured proper coding practices such as pep8 standards were followed,limiting technical debt to 5%.

Phenom People Private Limited | *Intern – Data Engineering Team* **Dec 2020 - Jan 2021**
- Delivered knowledge transfer sessions to peers on Python, Sql, workflow management platforms such as Airflow.

Bhabha Atomic Research Centre | *Intern - Electronics Division* **Jun 2018 - Jul 2018**
- Implemented general purpose image enhancement algorithms on grayscale images for low light image enhancement.
- Performed literature survey on the Retinex algorithms and compared performance of the algorithm to traditional methods such as contrast stretching and histogram equalization.
- Implemented Single Scale Retinex algorithm (SSR) and Multi Scale Retinex algorithm (MSR) on grayscale images to study the specific image enhancement technique.

ACADEMIC PROJECTS

SQL Query Executer Application **Jan 2022 - Apr 2022**
- Built a multi database query parsing engine that executes SQL queries in different databases namely MySQL and Redshift, displaying the time elapsed after completing the query.
- Reduced the response time by 35% with the help of indexing and built this as a cross platform mobile application for android and iOS using react native for frontend and flask backend.

What's Cooking Competition on Kaggle **Jan 2018 - May 2018**
- Developed a model to predict the type of cuisine from the list of ingredients given using support vectors classifier, logistic regression, neural networks and a voting classifier.
- Incorporated the concepts of text mining for the initial pre-processing. Combined the classifiers using the voting classifier to refine the accuracy of predictions in the final stage.

Bird Strikes Data Analysis and Visualization **Jan 2018 - May 2018**
- Analyzed Bird strikes data set using descriptive and inferential statistics to visualize the kind of aircraft that were involved in the strikes, frequency of damaging strikes over the number of aircraft engines.
- Applied five inferential statistical models namely Logistic Regression, Support Vector Machines, Random Forest, K Nearest Neighbors and Gaussian Naive Bayes to classify the damaging and non-damaging air-strikes.

PUBLICATIONS

Image Processing based Edibility Analysis of Spinach Leaves using Machine Learning **Oct 2018 - Feb 2019**
- Analyzed the edibility of Spinach leaves using image processing techniques and machine learning to simplify the detection of food spoilage,by correlating properties captured with age of leaf using ML.
- Published a paper ‘‘International Journal of Recent Technology and Engineering (IJRTE)’ in March 2019. Volume 7, Issue 6. ISSN No. 2277-3878.