Rithvik Srinivasaiya

Email : ritham.rithvik2000@gmail.com
Linkedin: https://www.linkedin.com/in/rithvik-srinivasaiya-b9b0b81a0//
Mobile : +1-979-942-5460
Github: github.com/RITHVIK23

Education

- **Texas A&M University** — Texas, United States
  Masters of Science in Data Science; GPA: 3.75/4.00 — *Aug 2023 - Dec 2024*
  Courses: Data Mining and Analysis, Statistical Foundation of Data Science, Computing Tools for Data Science, Machine Learning, Information Storage and Retrieval, Applied Analytics
- **Indian Institute of Technology(IIT), Kharagpur** — West Bengal, India
  B.Tech & M.Tech in Industrial and Systems Engineering; GPA: 8.00/10.00 — *Jul 2017 - May 2022*
  Courses: Linear Algebra for AI and ML, Data Analytics, Probability and Statistics, Programming and Data Structures

Skills Summary

- **Languages**: Python, C++, C, SQL, R
- **Tools**: Docker, GIT, mySQL, Matlab, Postgres, NoSQL, Tableau, MongoDB, Jira, IBM CPLEX, Simulink,Mathematica,OpenCV
- **Libraries and Framework**: PyTorch, SqlAlchemy, Scikit-learn, NLTK, Keras, TensorFlow, Flask, Matplotlib, Seaborn
- **Soft Skills**: Leadership, Determination, Time Management, Decision Making

Professional Experience

Atomberg Technologies Private Limited — Pune, India
Specialist - Quality Assurance — *Jun 2022 - Jul 2023*

- Revamped the data monitoring systems of KPIs of the plant using SCADA and Tableau, improving industrial operations by 3.5%.
- Derived statistically significant insights from defect data by developing a SARIMA model and assisted management decisions.
- Developed GLMs and ensemble regression models for defect data analysis and minimized defect rates by 4.32% in 6 months.
- Spearheaded a team of 22 members in achieving operational excellence in manufacturing quality of 2 products of Atomberg.

Center of Excellence in Safety Engineering and Analytics — Kharagpur, India
Research Assistant - Advisor: Dr. Jhareswar Maiti — *Jul 2021 - Nov 2021*

- Architectured a CNN framework using dilations in kernels to estimate the gaze direction of the human eye using facial images.
- Applied hyperparameter tuning, k-fold CV, data augmentation and dropout regularisation, improving test accuracy by 5.7%.
- Constructed an MLP linking stress with physiological metrics, advancing health monitoring for comprehensive assessment.
- Built a 3-layer NN correlating stress levels with gaze factors, achieving a nuanced insight into stress dynamics across varied tasks.

Academic Projects

Comparative analysis of KNN and CNN on FashionMNSIT — Texas A&M, United States
Term Project — *Aug 2023 - Dec 2023*

- Implemented CNN and K-NN to classify FashionMNSIT dataset and assessed models through precision, recall, and F1 scores.
- Created a blog post detailing the classification process, featuring insights into deep learning and machine learning applications with a focus on their practical implications in the clothing industry, innovation, scalability, and trends.

Predicting Traffic Flows using Regression Analysis — IIT Kharagpur, India
Master's Thesis Project - Advisor: Dr. Balagopal G Menon — *Jul 2021 - May 2022*

- Designed an innovative traffic forecasting model to improve the existing Intelligent Transportation System (ITS), combining multiple ensemble regression techniques using weights and achieved 84.3% accuracy in predicting road congestion levels.
- Created a user-friendly website in HTML, offering travel recommendations based on user inputs and real-time congestion data.

Text Analysis of Safety Data — IIT Kharagpur, India
Term Project — *Feb 2021 - Apr 2021*

- Designed an SVM classification model for evaluating accident severity within IIT Kharagpur's safety department.
- Utilized NLTK for text preprocessing and TF-IDF weighting on texts, resulting in a classification model with 94.3% accuracy.

Smart Shopping using Deep Learning — IIT Kharagpur, India
Term Project — *Jul 2018 - Dec 2018*

- Developed an image classifier using modified AlexNet, aiming to improvise the self-checkout process in retail stores.
- Developed a MATLAB GUI for dynamic bill amount calculations, achieving an 86.4% accuracy in categorizing product images.

Co-curricular & Honours

- **Professional**: Recognized for fast adaptation of line quality activities and OEE scores improvement of the plant. (2022 - 2023)
- **Technology**: Governor of Kharagpur Data Analytics Group, a student driven research society aimed to bring Data Analytics and Machine Learning enthusiasts together under the umbrella of single society. (2019 - 2022)
- **Student Mentor**: Responsible for mentoring 6 freshmen under the purview of Dean of Students' Affairs, IIT KGP. (2021 - 2022)
- **Certifications**: Google Data Analytics & Neural Networks and Deep Learning, Coursera. (2023)