JAYA SATHWIKA GADI

jg899@njit.edu |551-359 1846|LinkedIn|Github

EDUCATION

New Jersey Institute of Technology (NJIT)

Master of Science in Computer Science, GPA: 3.75/4.0

Selected Coursework: Data Structures and Algorithms, Bigdata, Data Analytics, Database System Design

Indian Institute of Information Technology, Design and Manufacturing, Kancheepuram

Bachelor of Technology in Computer Science and Engineering, GPA: 3.5/4.0

Newark, New Jersey 01/2023 - 12/2024

Chennai, India

07/2018 - 05/2022

SKILLS & CERTIFICATIONS

Programming Languages: C/C++, R, Python, JavaScript, SQL, Verilog, MATLAB, TypeScript, Linux

Tools and Libraries: NumPy, Pandas, Keras, TensorFlow, PyTorch, Matplotlib, scikit-learn, Microsoft power apps, MS Office **Visualization&Cloud Technologies:** Tableau, Power BI, Google Data Studio, SPSS, AWS, Google Cloud, Big Query, ETL, Airflow

Databases & UI/UX: MySQL, PL/SQL, PostgreSQL, MongoDB, SQL Server, Visual Studio code, Figma, Bootstrap

Advanced Computing & Development: Hadoop, Informatica, Large Language Models (LLMs), CI/CD, EDA, Jira, Scrum, Agile

Certifications: Oracle cloud infrastructure 2024 Generative AI Professional, AWS Cloud Practitioner, AWS Cloud Developer

EXPERIENCE

New Jersey Institute of Technology (NJIT)

01/2024 - 12/2024

Graduate Teaching Assistant | YWCC Capstone Course, Empirical Research in Software Engineering, Project Management courses

- Directed course logistics for a diverse cohort of 350 students, leveraging data-driven project management techniques
 to monitor and analyze student progress, ensuring alignment with key data science and analytical competencies.
 Collaborated closely with the sponsoring company to synchronize academic objectives with industry-relevant data
 science skills and real-world applications.
- Orchestrated a capstone open house event, facilitating data science project showcases where students presented their work on predictive modeling, data visualization, and machine learning applications.

Capgemini Technology Services India Ltd

01/2022 - 12/2022

Senior Data Analyst

- Implemented statistical analysis and regression modeling techniques to derive meaningful insights and developed predictive models to predict transaction time, and variations in payment methods across different times
- Demonstrated proficiency in data manipulation, regression modeling, and statistical analysis for real world business problems yielding a 27% reduction in average transaction time and a 22% increase in payment processing efficiency

Indian Institute of Technology, Kanpur

05/2021 - 10/2021

Research Intern | Advisor: Prof. Dr. Arnab Bhattacharya

- Collaborated cross-functionally on cardiovascular disease prediction by applying ensemble learning algorithms, achieving an accuracy of 91.23% and published at the esteemed international conference ACM-CODS COMAD
- Designed and implemented a cuisine-based ingredient recommendation system, employing a combination of association rule mining, collaborative filtering, multilabel classification, and machine learning algorithms

PROJECTS

Image Enhancement of Degraded Document Images

- Engineered a Conditional Generative Adversarial Network (CGAN) integrated with a state-of-the-art encoder-decoder architecture utilizing Vision Transformers (ViTs) and convolutional neural networks (CNNs), aimed at digitally restoring and enhancing scanned documents through deep learning techniques.
- Leveraged advanced deep learning algorithms such as Attention Mechanisms within the ViT, Residual Learning for noise reduction, and Adversarial Training in the CGAN framework to process unstructured document data. Implemented deblurring algorithms, adaptive denoising filters, and image enhancement techniques, which collectively resulted in a marked improvement in OCR (Optical Character Recognition) accuracy and performance.

Brain Tumor Classification using Multi-class Classification

- Developed a multiclass classification model for brain tumor classification using deep learning techniques, leveraging CNN architecture to accurately categorize tumor types from MRI images, including glioma, meningioma, and pituitary tumors.
- Achieved high accuracy by utilizing transfer learning with pre-trained models and optimizing performance through data preprocessing and augmentation techniques, contributing to improved diagnostic support in medical imaging.