

SEJAL KANKRIYA

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OBJECTIVE

Data science enthusiast with a strong foundation in Python, statistical analysis, and Machine Learning, aiming to leverage my skills in developing and optimizing AI technologies across various platforms. Skilled at translating complex data into strategic insights for actionable business solutions.

EDUCATION

Master of Science: Data Science, University at Buffalo, The State University of New York, February 2024

Coursework: Computer Vision and Image Processing, Statistical Learning, Probability, Data Modelling & Query Languages

Bachelor of Engineering: Computer Engineering, Vishwakarma Institute of Information Technology, June 2020

Coursework: Design & Analysis of Algorithm, Artificial Intelligence & Robotics, Data Analytics and Machine Learning

SKILLS

Programming Languages and Libraries: Python, R, Java, C, C++, MATLAB, NumPy, Pandas, Matplotlib, PyTorch, Keras, Seaborn, HTML5, CSS, Angular, JavaScript.

Cloud and Databases: PostgreSQL, SQLite, Oracle, Hadoop, Hive, Spark, NoSQL, MongoDB, GCP.

Tools: Anaconda (Jupyter Notebook), PyCharm, Git, Tableau, Power BI, pgAdmin, Android Studio, Jira, Postman, Docker.

Other Skills: Machine Learning, Deep Learning, ETL, EDA, Agile Methodology, Data Modeling, Big Data, Data Visualization, Advanced Excel, Collaborative Problem-Solving, Fast-paced Perfectionist, Teamwork and Adaptability.

EXPERIENCE

Graduate Research Assistant, University at Buffalo, Buffalo, NY: June 2023 – December 2023

- Collaborated with 5-member team in applying GNNs for hospital monitoring and clinical pathway identification, resulting in a 27.4% enhancement in patient movement prediction accuracy and optimizing resource allocation.
- Leveraged Natural Language Processing (NLP) techniques to process text-based comments from doctors, improving patient outcome prediction accuracy by 8.2%.

Programmer Analyst, Cognizant, India: January 2020 - July 2022

- Applied Agile methodologies to streamline inquiry processes, reducing response time by 20% and providing efficient support for 50+ weekly inquiries across Confluence, Jira, and Bugzilla.
- Facilitated effective knowledge transfer to a group of four new joiners, ensuring a smooth transition into roles and enhancing team productivity.
- Collaborated with cross-functional teams to use root cause analysis (RCA) to identify compliance gaps, reducing production incidents by 30%, ensuring system integrity and regulatory adherence in project delivery.
- Optimized data warehousing processes by coordinating database development and refining ETL workflows, improving data integration and reporting efficiency for critical business insights.

PROJECTS

Satellite Image Dehazing: Python, PyTorch, OpenCV, TensorFlow, NumPy, Matplotlib, Seaborn

- Built and implemented AOD-Net image dehazing model, achieving PSNR 18 and SSIM 0.6 on a 1000-image unstructured dataset. Enhanced existing model, boosting PSNR 20% and SSIM 10%.
- Led a team to develop a real-time image dehazing application utilizing Python and OpenCV, optimizing processing time from ~10 seconds to ~4 seconds per image.

360-degree object detection and assistance for visually impaired people: Python, MySQL, Java, TensorFlow, NumPy

- Led development of an Artificial Intelligence-based system incorporating voice commands for object detection, enabling visually impaired people to navigate surroundings with 91% accuracy via 360 cameras.
- Designed and built "Hope," a self-sufficient robotic assistant for blind people, utilizing ResNet18 for object detection and NLP for voice interaction.

Time-To-Event Analysis un Clinical Trials: R, Data Analysis (dplyr, survival analysis), ggplot2

- Conducted time-to-event analysis for a clinical trial utilizing Kaplan-Meier estimator, revealing 13.3% increase in estimated post-diagnosis survival probability for new drug.
- Incorporated Bayesian Inference to refine survival probability estimates by integrating prior clinical outcomes with current trial data, achieving a 15% increase in predictive accuracy, by employing advanced statistical models on R, analyzing over 200 patient datasets to predict treatment efficacy.

RESEARCH PUBLICATION

International Journal for Research in Applied Science & Engineering Technology, Volume 8, Issue VI, June 2020

Technical Paper Number (IJRASET29247): [Impact of COVID-19 on Indian Economy](#)