Sanskruti Rajankar

https://www.linkedin.com/in/sanskruti-rajankar/

https://github.com/sanskruti-git

EDUCATION

Indiana University Bloomington

Bloomington, Indiana

Mobile: +1(930)333-5344

Masters - Data Science

Aug 2023 - May 2025 (expected)

Email: sanskrutirajankar3@gmail.com

Courses: Applied Machine learning, Advanced Database Concepts, Statistics, ML in Signal Processing, Applied Algorithms

Shri Ramdeobaba College of Engineering

Nagpur, India

Bachelor of Technology - Electronics Engineering

June 2019 - June 2023

Courses: Data Structures and Algorithms, Database Management System, Artificial Intelligence, Probability theory and Stochastic processes, Computer Networking, Differential Equations, Linear Algebra, Statistics and Probability, Calculus

SKILLS SUMMARY

Skills: Python, MYSQL, Tablue Power BI, Data Analytics, Statistics, Predictive Modeling, Data Visualization

Library: Pandas, Numpy, Matplotlib, Seaborn Scikit, TensorFlow, Keras, Django, Flask

EXPERIENCE

Indian Institute of Technology Roorkee

Roorkee, India

Summer Research Intern (Full-time)

April 2022 - Sept 2022

- $\circ~$ Chosen as one of the top performing in terns from a pool of 150+ students for a prestigious summer internship program
- o Conducted an extensive research and literature review of 30+ papers for Image-based plant disease detection techniques
- o Performed image segmentation, image processing techniques to enhance the quality and clarity of images using OpenCV
- Effectively charted supervised ML algorithms using TensorFlow, CNN, plant classification of 4 types with 94% accuracy

Center for Microsystems, SRCOEM

Nagpur, India

Research Intern (Part-time)

March 2021-Nov 2021

- o Collaborated with a prominent local hospital for determination of Automated Antibiotic Susceptibility on MDR bacteria
- o Visited the hospital, collected data samples for testing and training and ascertained the response caused by antibiotics
- o Employed Hough's transform and edge linking techniques proficiently to measure the circular periphery around bacteria
- \circ Streamlined the laborious manual calculation process through full automation, resulting in a 60% reduction in time cycle

Projects

BOSTON CONSULTING GROUP (Data Science Research project)

- Spearheaded a data science project at BCG to predict customer churn, where I led the utilization of advanced machine learning algorithms to meticulously analyze usage patterns and price sensitivity, reducing churn by an estimated 20%
- \circ Engineered key predictive features and trained a Random Forest classifier, achieving a prediction accuracy of 85%, which informed a targeted discount strategy projected to save the client 500k annually.
- \circ Synthesized complex data findings into an executive summary for key stakeholders, directly influencing the client's retention strategies and contributing to a potential 15% increase in customer lifetime value.
- Led the initiative for data augmentation, integrating external datasets to enhance model robustness, thereby increasing predictive power by 10% for high-risk customer segments.

SURAKSHA - Woman Safety Device:

- Created wearable IoT safety technology designed specifically for women, reducing the emergency response time by 50%
- $\circ \ \ Streamlined\ operations\ by\ integrating\ GPS\ \&\ GSM\ tech,\ cutting\ power\ use\ by\ 40\%,\ ensuring\ secure\ data\ transmission$
- \circ Successfully deployed the solution to aid 3,500+ women with a reliable safety device, enhancing their personal security

SMART RETAIL STORE:

- \circ Led a team of four to develop a cutting-edge smart indoor navigation app for departmental stores, resulting in a 30% increase in customer satisfaction.
- Conducted 20+ interviews with industry experts and retailers, informing data-driven solutions that reduced customer complaints by 40%.
- $\circ\,$ Designed and managed databases with 1,000+ item locations, while implementing custom MYSQL scripts that improved system efficiency by 25%

Achievements and Publications

Antibiotic Susceptibility Testing - Successfully presented a comprehensive paper on the given title at the prestigious National Level Paper presentation competition 'ENNOVATE' convened at the Shri Ramdeobaba College of Engineering

Volunteer Experience

Department Representative and Joint Secretary of Student Council Committee

Nagpur, India

Conducted and raised funds for technical and sports events impacting over 3000 students.

Jan 2020 - Present

Organized events to raise funds to support education and livelihood of under privileged kids.

Nagpur, India June 2020 - Present

MAD- Make a Difference

Mumbai, India

Volunteered for teaching Maths and Science to 30 students of class I to V in deprived areas.

Aug 2019 - Present