


Dristanta Das

Kolkata, West Bengal, Phone: +91-8583918089

 www.linkedin.com/in/dasdristanta13/ Kaggle: dristantadas

 dasdristanta13@gmail.com  GitHub: dasdristanta13

Summary

Associate data scientist with expertise in computer vision, natural language processing (NLP), deep learning, and machine learning. Engineered cutting-edge NLP solutions for a healthcare provider search system, increasing operational efficiency by 20–25%. Achieved a 30–40% improvement in efficiency by utilizing open-source large language models to expedite data preparation activities.

Skills

Expert: Machine Learning, Deep Learning, LightGBM, XGBoost, NLP, NER, PyTorch, Language Model

Proficient: Python, R, Git, Github, Gitlab, Bitbucket, VS Code, Scikit-learn, Data Analysis

Novice: Computer Vision, MySQL, LLM, LORA, AWS(S3, EC2), Azure

Experience

UST (Formerly Abzooba Inc)

Kolkata, West Bengal

Associate II Data Scientist

July 2022 – Present

- Orchestrated a client-facing provider search system through cross-functional collaboration, leveraging advanced NLP techniques to deliver personalized provider suggestions, spearheading optimization endeavors that boosted search efficiency by 30% while exceeding client expectations via clear communication.
- Optimized data preparation tasks using open-source Large Language Models (LLMs), enhancing efficiency by 40% with tabular data.
- Collaborated with cross-functional teams to implement semantic search capabilities, enabling the retrieval of user-friendly medical terms from unknown layperson terms, culminating in a 25% enhancement in operational efficiency and ultimately improving service quality for end-users
- Enhanced search result precision by 15% using Named Entity Recognition (NER) techniques to extract key features from user queries, aligning the system with customer needs.

Videonetics Technology Private Limited

Kolkata, West Bengal

Data Science Intern

Jan 2022 – Jun 2022

- Pioneered end-to-end Automatic Number Plate Recognition (ANPR) solution employing YOLO-v6 and ResNet architectures in PyTorch. Resolved issues with low-resolution license plate images from roadside CCTV cameras, improving performance by 15%.
- Spearheaded data preprocessing and annotation efforts, refining unannotated number plate images using advanced techniques, enhancing character visibility, and improving ANPR accuracy by 20%.
- Engineered character segmentation and classification models using PyTorch and state-of-the-art computer vision techniques, boosting performance by 15% through parameter optimization.

Indian Institute of Technology Kharagpur

Kharagpur West Bengal

Summer Intern

Aug 2021 – Dec 2021

- Devised deep learning solution using pre-trained ResNet-34 model, fine-tuning it to analyze breathing sounds, achieving impressive accuracy range of 70% for distinguishing COVID-19 positive and negative patients based on cough sounds despite limited prior work in this area.
- Processed and curated a comprehensive dataset of 1,500 breathing sounds from COVID-19 afflicted and healthy participants.
- Innovated a pioneering approach by combining hand-crafted features and MFCCs, enhancing the deep learning model's performance by 35%.
- Produced robust and reliable results by calculating probabilities for each sample, assessing the likelihood of individuals being COVID-19 positive or negative.

Personal Projects

Automated Summary Evaluation Competition

Organized by CommonLit, Vanderbilt University, Georgia State University & Kaggle

- Architected a machine learning model that gained a 0.48 Mean Columnar Root Mean Squared Error, ranking in the top 9% of participants.
- Earned a Bronze Medal from Kaggle for the model's performance in evaluating the quality of student-written summaries.
- Demonstrated practical impact by enabling automated scoring and feedback for teachers and learning platforms.

Education

RKMVERI

Big Data Analytics, M.Sc., 7.71 CGPA

Belur, West Bengal

July 2020 – June 2022

Presidency University

Mathematics, B.Sc., 7.05 CGPA

Kolkata, West Bengal

May 2017 – June 2020

Certificate & Recognitions

AWS Certified Cloud Practitioner: CLF C01

Microsoft Certified: Azure Fundamentals, AZ-900