Prakash V.S. Tomar

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Github : $\underline{lonewolf235}$ Mobile: +91~8979790975 $\underline{LeetCode}$: $\underline{lonewolf235}$ Other \underline{Links}

Education

Institute Of Engineering and Management

Kolkata, India

Bachelor of Technology - CSE(specialization in AIML); GPA: 9.62

November 2020 - August 2024

Courses: OOPs, Computer Networks, Data Structures, Database Management, Machine Learning, Algorithms, OS, Artificial Intelligence

Skills Summary

• Languages: Python, JAVA, SQL, Bash, C

• Frameworks: Numpy, Pandas, Matplotlib, Scikit-Learn, Plotly, TensorFlow, Keras, PyTorch

• Tools: Jupyter Notebooks, Excel, VS Code, Tableau, MongoDB, GIT, MySQL, OracleDB, Google Colab

Platforms: Windows, Raspberry Pi, Kaggle, Arduino, Github Codespaces
 Soft Skills: Team Coordination, Event Management, Public Speaking

Experience

Remote Remote

Data Science Intern

October 2022 - Present

• Automation Pipelines: Engineered a fully automated pipeline to fetch annotated datasets and extract information to parse into a single CSV to perform model training on that dataset reducing the data-processing time by 45%.

- \circ Model Training: Trained and Inference various Object Detection and Activity Recognition models on YoloV5 and MMAction2 to refine the weights by 18%
- Metadata Management: Extracted GPS information from videos and manipulated them to calculate spatial pothole density of any region increasing accuracy by 30%.
- o Data Annotation and Integration: Annotated 8000+ images and videos for the preparation of datasets for numerous projects and used MongoDB and PyMongo to integrate data on the server.

Tools used: YoloV5, MMAction2, exif tool, Coco-Annotator, PyMongo, MongoDBCompass, Python, LabelMe, ImgLab

Pantech Solutions Pvt. Ltd.

Remote

Machine Learning Intern

November 2021 - March 2022

Developed and implemented a movie recommendation system that leveraged computer vision and machine learning algorithms; increased user engagement by 20% and reduced churn rate by 15%.:
 Tools Used: Tableau, MySql, PyTorch, Scikit-Learn, Seaborn, MongoDB

Projects

• Payload Drone (Developed under Prof.Modhumita Pal):

Constructed a bidirectional system using Raspberry Pi 4 and Arduino to collect data from sensors(CO, Temperature, and Humidity) through drone and feed it to the Base station.

Incorporated a Decision tree model to classify the pollution data whether it is harmful to health or not.

• BabySitter Checker : Artificial Caretaker:

Converted sample audio files into array format through Fourier transformation to train the model for classifying anomalies in the data.

This model could detect any unusual behavior of the babysitter and inform parents immediately about the issue.

Publications

• Review Paper: Machine Learning - A New Perspective.

Presented in IEMPOWER 2022 (In Publication by AIP Publishing)

Certificate:

Paper

Honors and Awards

- Completed HacktoberFest 2021 by contributing to 5 various repositories.
- \bullet Won Internal Hackathon of Kavach-2023 from IEM, Kolkata.
- Reached to Finals of Table Topic Event held in ToastMasters International from District 41 of Kolkata, India. Link
- Reached in Top 10 teams in Intelligex Hackathon(ML-based hackathon) organised by Innovacion(IEM Annual Tech-Fest) in April-2022
- Earned Diploma in Indian Classical Music(Vocal) in August-2019

Volunteer Experience

Machine Learning Co-Lead at IEM Coding Club

Kolkata, India

Conducted Data Science and Analytics Workshops which impacted 300+ students.

August 2022 - Present

AI/ML Core Member at GDSC IEM

Kolkata, India

Organized ML-related events and conducted workshops for the students of IEM

August 2022 - Present