Pratham Saraf

India · prathammsaraf@gmail.com · +91 8982597809 · GitHub ↗ · Kaggle ↗ · Medium ↗ · Portfolio ↗ · Linkedin ↗

Education

Indian Institute of Information Technology Bhopal
BTech Computer Science December 2021 - Present

Relevant Coursework

- Object Oriented Programming
- Advanced Engineering Maths
- Discrete Structures
- Object Oriented Programming

Research Experience

Indian Institute of Information Technology, Bhopal November 2022-Present
Research Intern under Prof (Dr.) Bhupendra Singh Kirar

- Developed and implemented Neural Networks for the research paper, which involved utilizing convolutional neural networks and transfer learning techniques.
- Analyzed the performance of the classifier using various evaluation metrics, including accuracy and specificity, and presented the findings in the research paper.

Work Experience

Acciolbis September 2022 - November 2022
Machine Learning Intern ↗ LOR ↗

- Improved document retrieval time to under 5 seconds through semantic searching and scoring, and optimized memory storage.
- Employed GCP to infer models and evaluated various open source text to image models and their variants.

Projects

MultiModalGNN-SentimentAnalysis April 2023 - Present

- Developed a **MultiModalGNN-SentimentAnalysis** model using variety of models **Graph Attention Mechanism**, BERT, and VGG16 , **Graph Neural Network** to perform sentiment analysis on a multimodal dataset.
- Created a graph structure using the extracted features and achieved an accuracy of 60% The model utilized an **ensemble of neural networks** to leverage both image and text information for accurate sentiment classification.

Self driving car simulator August 2022
Github link for project ↗ Kaggle Notebook ↗

- Gathered **145 thousand photos** which consisted of **3 perspectives** using automobile simulation. It included the braking speed, throttle position, and degree of steering wheel rotation
- Trained model based on **Dave 2 system** which comprised of 5 convolutional layers and 3 fully linked layers; Data augmentation was done as well
  Skills Used: Python, CNN, Data collection, Pytorch

Position of Responsibility

GNU/Linux Users Club IIIT Bhopal
ML-OPS lead August 2022 - Present
Google Developer Student Clubs(GDSC) IIIT Bhopal
Assitant AI-ML lead August 2022 - Present
Kratigence IIIT Bhopal
Core Team Member August 2022 - Present

Skills

Programming Languages:	Python, C++ ,C, R,
Platforms:	GitHub (with Github Actions), GitLab, Git
Database Management Systems:	MySQL , PostgreSQL, Mongo-DB
Web Development:	HTML , CSS (Bootstrap and Tailwind) , JavaScript ,Babel JS
Libraries / Frameworks:	Flask , Django, FastAPI, Pytorch, Tensorflow
Soft Skills:	Leadership, Communication Skills, Organised
Langues:	German , English

Achievements

Runner Up **HACK WITH GDSC IIITB: HACKATHON Google Developer Student Club**

certificate ↗
Won second prize in Intra IIIT development contest conducted by GDSC IIIT Bhopal for creating a password manager.
Skills Used: Python, MySQl, Encryption Methods (MD5Sum) Aug 2022

Certificates

CS50's Introduction to Programming with Python (Course Link ↗) March 2022 - May 2022

Machine Learning Specialization by Deeplearning.ai (Course Link ↗) April 2022 - July 2022

Deep Learning Specialization by Deeplearning.ai Course Link ↗ April 2022 - Present