Jyotirmay Paliwal

Dedicated and innovative software developer skilled in Python and C++, specializing in Machine Learning, Deep Learning, and Data Science. Proficient in PyTorch and Scikit-learn, with experience building intelligent solutions for real-world challenges, from computer vision applications to generative models.

EDUCATION

Parul University

Bachelor of Technology in Computer Science & Engineering

August 2019 - August 2023

Coursework: Deep Learning, Machine Learning, Artificial Intelligence, Computer Vision, Operating Systems, Data Structures & Algorithms, DBMS and Statistics.

WORK EXPERIENCE

Utkarshini Edutech

Computer Vision Intern

Feb 2022 - May 2022

- Developed a Deep Learning model leveraging Convolutional Neural Networks (CNNs) to detect people stranded in floods using computer vision techniques, enhancing disaster response efforts.
- Implemented an automated data pipeline that scraped real-time images from Twitter using #flood hashtags, preprocessing and feeding them into the model for rapid analysis and detection.

PROJECT

Image Segmentation on Cityscapes data using PyTorch and UNet

October 2024

- https://github.com/jyotirmaypaliwal/Image-Segmentaion
- · Implemented image segmentation on Cityscapes dataset using UNet, enhancing object detection accuracy for self-driving applications. Image segmentation also has applications in medical field, such as detecting tumours etc.

DCGAN on Celeba dataset using Pytorch

September 2024

- https://github.com/jyotirmaypaliwal/DCGAN-on-Celeba-dataset
- Implemented DCGANs on the CelebA dataset using PyTorch, enabling realistic image generation.

Gender recognition using Inception-v3 and PyTorch

August 2024

- https://github.com/jvotirmavpaliwal/Gender-recognition
- Using the data from CelebFaces Attributes (CelebA) Dataset which consists of 202,599 images with 40 attributes, I trained an Inception-v3 model with some custom composed output classes to recognize different gender in images.

Flood-Response-using-CNNs

Feb 2022

- https://github.com/jyotirmaypaliwal/Flood-Response-using-CNNs
- · Developed a Deep Learning model for flood victim detection using Computer Vision, improving disaster response efficiency by automating image analysis from social media.

MNIST digit recognition using Logistic Regression

March 2023

- https://github.com/jyotirmaypaliwal/Handwritten-digit-recognition
- Here I used Logistic Regression on MNIST dataset. I used Sci-kit Learn to implement Logistic Regression.

SKILLS

- Programming: Python, C++, SQL, Bash/Shell Scripting, HTML
- Machine Learning & Al: PyTorch, TensorFlow, Scikit-learn, Pandas, NumPy, Deep Learning, Model Optimization, Computer Vision (OpenCV, YOLO), NLP (Transformers, BERT), Generative Models (GANs, VAEs)
- Development Tools: Git, GitHub, Docker, VSCode, Jupyter Notebook, Google Colab, Linux, Windows, mac0S
- Soft Skills: Problem-Solving, Critical Thinking, Communication, Teamwork, Adaptability, Time Management