

Piyush Kumar Gupta

Email: pgupta0122333@gmail.com

Mobile: +91 6387120398

LinkedIn: <https://www.linkedin.com/in/piyush-kumar-gupta-089312303>

Leetcode: <https://leetcode.com/u/pgupta246>

GitHub: <https://github.com/piyushgupta246>

EDUCATION

Noida Institute Of Engineering And Technology, Greater Noida (2022 - present)

CGPA: 7.97

Bachelor of Technology - Computer Science & Engineering (Data Science)

Jai Gurudev Raj Public School, Ghazipur (2020 - 2021)

percentage: 81.6%

10+2 Equivalent (Science Stream)

Jai Gurudev Raj Public School, Ghazipur (2018 - 2019)

percentage: 77.83%

High School

EXPERIENCE

Artificial Intelligence and Machine Learning(Trainee) | (Nov 2024 - Jan 2025)

Pyramid IT Consulting Pvt. Ltd. | Greater Noida

- Built an image classification and real-time object detection system using CNNs (PyTorch) and YOLOv5 (OpenCV).
- Trained models on custom datasets with data augmentation and hyperparameter tuning in Google Colab.
- Applied transfer learning (ResNet, VGG) to improve accuracy and reduce training time.
- Visualized model performance using TensorBoard and Matplotlib.
- Deployed the detection pipeline via Flask API and collaborated using GitHub.
- Tools: PyTorch, TensorFlow, OpenCV, GitHub, Pandas, NumPy.

Data Science Intern | (Oct 2024 - Nov 2024)

Next Gen Dev | Greater Noida

- Developed ML-based projects including stock price prediction and sentiment analysis.
- Built a Titanic survival prediction model using classification algorithms.
- Implemented real-time ML model deployment for instant predictions.
- Gained hands-on experience in end-to-end model building, from data preprocessing to evaluation.

Hackathon & Event | (Sep 2024) | [Project Link](#)

GeeksForGeeks Hackfest 2024, GFG Office Noida

- Runner-up for developing a pneumonia detection web app using deep learning.
- Built a CNN model to detect pneumonia from chest X-rays with high accuracy.

PROJECT

Rooftop Solar Energy Estimation (Transformer-Based Models) | [Project Link](#)

- Developed a vision transformer-based model to estimate rooftop solar suitability from satellite images. Preprocessed aerial imagery and extracted spatial features. Used transformer architecture for accurate energy prediction to support renewable planning.
- Tools: Python, TensorFlow, Keras, Vision Transformers, OpenCV, Pandas, Matplotlib, Random Forest.

Smart AI Assistant | [Project Link](#)

- Built an AI research assistant with real-time query handling using React (frontend) and Flask/Node.js (backend), leveraging NLP APIs for contextual responses via an interactive UI.
- Tools: React, Flask/Node.js, Scikit-learn, TensorFlow, REST APIs, JavaScript.

Sign Language Detection | [Project Link](#) | [Blog](#)

- Developed a machine learning model to detect sign language gestures from images. Achieved high accuracy through preprocessing, augmentation, and model tuning. Visualized data distribution and performance using Seaborn and Matplotlib.
- Tools: Python, MediaPipe, OpenCV, TensorFlow, Keras, Matplotlib, Seaborn.

SKILL

Languages: Java, Python, JavaScript

Frontend: React.js, HTML, CSS, Bootstrap, Tailwind

Backend: Flask, Django, API Integration

Database: MySQL, MongoDB

Version Control: Git, GitHub Contributions

Software Development: OOPs, DBMS, Operating Systems, Computer Networks

Machine Learning & AI: TensorFlow, Keras, Scikit-learn, OpenCV

Data Science: Apache Spark, PySpark, Data Ingestion & Processing, Spark Streaming

Visualization Tools: Tableau, Power BI, Matplotlib, Seaborn

Platforms: AWS, Google Colab, Linux (Ubuntu), Visual Studio Code, Canva (UI/UX)

Soft Skills: Effective Communication, Leadership & Team Management, Problem Solving

CERTIFICATIONS

- Cisco Certified Network Associate (CCNA) - **CISCO**
- Build an Azure AI Vision solution - **Microsoft**
- Human-Centered Design for Inclusive Innovation - **University of Toronto (via Coursera)**
- Building Machine Learning Systems with TensorFlow - **Infosys Springboard**
- Data Analysis with Python - **IBM (via Coursera)**
- Problem Solving - **Hackerrank**

HONORS AND AWARD

- Selected as Branch Representative (Data Science) for the Capgemini Industry-Academia Meet
- Core Member, Gen AI Club – Organized and led AI-focused college events
- Runner-up, College Photography Competition – Megapixel Club
- Runner-up, Google Cloud Arcade Program 2024