PIYUSH MAJI

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EDUCATION

Indian Institute of Technology Hyderabad   Expected July 2027
M.Sc. in Physics | Telangana, India   CGPA:7.5/10

Hooghly Mohsin College   August 2024
B.Sc. in Physics | West Bengal, India   CGPA: 7.28/10

PROJECTS

Voice Assistant with AI Integration (Friday)
Self-Initiated Project

- Developed a Python-based voice assistant capable of wake-word detection, speech recognition, and command execution using **SpeechRecognition** and **pyttsx3**.
- Implemented modular command routing for tasks such as web navigation, music playback, time/date queries, and AI-based conversational fallback.
- Integrated external APIs and libraries for data handling, preprocessing, and future analytics extensions.
- Focused on clean project structure, multithreading for non-blocking speech output, and cross-platform compatibility (macOS/Windows). You can find it on my **Github**.

Computational Modeling of Particle Motion in Brownian Systems
Prof. Anupam Gupta, Department of Physics, IIT Hyderabad

- Developed a Python workflow using **NumPy**, **Pandas** to visualize particle trajectories, and compute Mean Squared Displacement (MSD).
- Applied log–log regression on MSD data to classify motion types (diffusive, sub-diffusive, super-diffusive), enabling automated scientific interpretation.

SKILLS

Hard Skills: Python, C, LaTeX, MS Office, Pandas, NumPy

Soft Skills: Communication, Data Analysis, Problem-Solving, Critical Thinking

CERTIFICATIONS

- Completed NPTEL course "Introduction to Quantum Computing: Quantum Algorithms and Qiskit" (IITs & IISc initiative).

LEADERSHIP & MANAGEMENT

Coordinator(Inbound and Multimedia), International Relations Cell, IIT Hyderabad
Guided exchange students (mainly from Japan and the US) by organizing orientation sessions, cultural events, and local school visits to promote cross-cultural understanding, and also arrange outbound tours

Member of Infocus (Photography Club, IIT Hyderabad)
Managed logistics and promotion for campus-wide photography contests and exhibitions.