Piyush Kumar Pandey

Web Development
Deep Learning, Generative AI
App Development.
B-Tech (CSE)

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Developer Portfolio
Leetcode Profile
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ABOUT

I am a 3rd Year BTech student from the CSE branch. I bring a proactive and adaptive approach to my work. My experience as a programmer has sharpened my ability to tackle complex challenges with a positive mindset.

EDUCATION

Degree	Institution	Year	CGPA/Per
B. Tech (CSE)	IMS Engineering College	2022 – 2026	8.76 CGPA
Intermediate (12th)	Delhi Public School, (CBSE)	2021 – 2022	87 %
High School (10th)	St. Joseph's Academy, (ICSE)	2019 – 2020	97 %

EXPERIENCE

Undergraduate Student Researcher at Amity University, Noida (June 2024 - July 2024)

- Conducted extensive research on deep learning models under the domain of Artificial Intelligence.

- Developed a novel CNN architecture leveraging transfer learning and multi-head attention for the efficient classification of biodegradable and non-biodegradable materials.

- Successfully deployed the model into a real-time Flutter application for practical use.

- Authored a research paper on the project, which was accepted and published by IEEE.

Web Development Intern at Prodigy Infotech (March 2024 – April 2024)

- Worked on various tasks using ReactJS, Tailwind CSS, HTML, CSS, JavaScript.

Intern Shala Student Partner (August 2023 – September 2023)

- Worked on various social media platform to make valuable connections.

TECHNICAL SKILLS

- **Programming:** Data Structures and Algorithms, OOPS, DBMS, Machine Learning, Deep Learning, Web Development.
- **Languages:** Java, C, Python, JavaScript, HTML, CSS, MYSQL.
- **Frameworks:** ReactJS (basic), Flutter (basic), Firebase, Tailwind, Bootstrap 5, Git, GitHub, TensorFlow, Lang Chain, vector database, Hugging Face, Llama.
- **Additional Skills:** Competitive Programming (beginner), Mobile App Development, Problem-Solving, Optimism, Leadership, Research Paper Writing.

PROJECTS

HerShield -Women Safety and Security Application | Github-Hershield   *Mar - Apr 2024*

- Redefining safety for women by unique features.

- Area Profiling: Assigning Safety Index to various localities based on their specific crime rates.

- Bystander's assistance: Engage the local community by allowing individuals in the vicinity to receive notifications about incidents reported nearby, encouraging prompt assistance from people in the area.

- Technology Used – Flutter, Dart, Google Maps API, tflite.

Waste Classifier | Waste-Classifier   *June – July 2024*

- Developed an CNN based deep learning model for effective classification of biodegradable and non-

biodegradable materials.

- Used transfer learning with MobileNetV2 model and further brought novelty by adding multi-head attention mechanism and finally deployed the model in a mobile app for real time use.
- Technology Used – CNN, MobileNetV2, multi-head attention, Kaggle, flutter.

Bhagwat-Gita Chatbot | Bhagwat-Gita-Chatbot   *Sep 2024*

- Developed a Bhagavad Gita chatbot leveraging Hugging Face's Ollama model, trained on the Bhagavad Gita book PDF to provide insightful and contextual responses.
- Utilized Pinecone vector database to store text embeddings for efficient query retrieval.
- Implemented LangChain to manage conversation memory using chains for enhanced user interaction.
- Designed a responsive frontend using HTML and CSS for an engaging user experience.

ACHIEVEMENTS/CERTIFICATIONS

- Won **1st prize** at IEEE Mega Project 7.0 Technical Event hosted by **Birla Institute of Technology (BIT),** Mesra, Ranchi **-** Certificate
- Won **1st prize** at Innovation Hack Day Technical Event held at IMS Engineering College.
- Authored a **research paper** on the classification of biodegradable and non-biodegradable materials**, accepted by IEEE.**
- Won **2ND prize** at Bizthon's **IIT Patna** Hackmatrix Hackathon - Certificate
- Earned **Certificate of Achievement** at **Walmart** Sparkathon - Certificate
- Earned **IIT Madras** Research Park certification in Python programming -Certificate
- Earned **Nvidia** certification on Fundamentals of **Deep Learning** -Certificate