

Arpit Sengar

arpitsengar99@gmail.com | 9311389851 | arpy8.com | linkedin.com/in/arpitsengar | github.com/arp8

Education

VIT Bhopal University, B.Tech. in Computer Science

Sept 2022 – Aug 2026

- GPA: 7.6/10.0
- **Co-Curriculars:** President, Omdena VITB Chapter - Led and contributed to 10+ open-source projects.
- **Achievements:** Selected for the finals of Smart India Hackathon (SIH) 2024.

Experience

SDE Intern, Simplify3x – Bangalore, India

Oct 2024 – Dec 2024

- Improved chatbot response accuracy by developing a context-aware RAG-based system that integrated retrieval and generation techniques
- Enabled real-time, bidirectional communication using WebSocket connections, boosting chatbot responsiveness
- Optimized conversational AI through enhanced NLP and real-time data streaming techniques for seamless user interactions

AI ML Intern, Paritranya Global Pvt. Ltd. – Bhopal, Madhya Pradesh

Jun 2024 – Aug 2024

- Built a CDSS-based ML model for skin lesion detection using Grounding DINO with Meta SAM, enhancing diagnostic accuracy
- Deployed the solution as an API on Hugging Face for scalable and efficient medical image analysis

Junior ML Engineer, Omdena – Remote

Apr 2024 – Jun 2024

- Led deployment of team-developed models and APIs, ensuring scalable and reliable integration of solutions
- Developed and fine-tuned a sentiment analysis model using Google BERT, improving classification accuracy across diverse text inputs
- Actively contributed to various stages of the project lifecycle, including data preprocessing, model evaluation, and documentation

SDE Intern, Rex Industries – Bhopal, Madhya Pradesh

Nov 2023 – Apr 2024

- Developed computer vision scripts using OpenCV with a focus on accurate body pose estimation
- Specialized in implementing efficient solutions for real-time human pose tracking and analysis
- Worked with ROS (Robot Operating System) to integrate computer vision modules with robotic systems for enhanced automation.

Projects

Retro Games with Gestures

arp8/aiconclave

- Developed Python scripts to control retro games using body and hand gestures with MediaPipe.
- Built a local web app using Streamlit to manage gesture-based control for games.
- Set up a dedicated exhibition room where attendees could play games like Tekken 3 and Pinball using gesture controls.
- Tools Used: Python, MediaPipe, Streamlit, OpenCV

Electric Ripstick (LO62)

arp8/project-LO62

- Developed an electric ripstick using ESP32 to control a BLDC motor and a timing belt mechanism for speed and movement control.
- Designed a mobile app with React Native to wirelessly control motor speed via BLE and ESP-Now protocols.
- Tools Used: ESP32, React Native, CAD, 3D Printing, BLDC Motor, LiPo Battery, ESC

Technologies

Languages: Python, Java, C, C++, JavaScript, TypeScript

Domains Covered: Web Development, App Development, Backend Development, Frontend Development, Machine Learning, Deep Learning, Computer Vision, Data Science, DevOps, 3D Designing, Web Scraping

Softwares & Tools: Fusion 360, Figma, Adobe Illustrator, Adobe Photoshop, Blender, Arduino IDE, Selenium, Postman, Git, GitHub, Docker, AWS, Linux