ARNAV SHARMA
Computer Science and Engineering

arnavsharma2908@gmail.com, 9311775381, Delhi, India
linkedin.com/in/arnav-sharma-93a9bb269/
github.com/ArnavSharma2908
https://my-portfolio-bice-three-90.vercel.app/

Prospective Computer Science Engineer. Strong Passion and work in AI, Robotics, and problem-solving with notable achievements. Proficient in Python, with experience in Java, C, Full Stack etc. Beyond tech, a FIDE-rated chess player and an avid table tennis enthusiast. Skilled in Management.

Education

The National Institute of Engineering, Mysuru   **Sep 2023 - Sep 2027**
  Bachelor of Engineering in Computer Science and Engineering

Salwan Public School, Mayur Vihar, Delhi   **Apr 2021 - Mar 2023**
  High School Certificate in Science with CS

Core Skills

Languages and Development Tools: Python, JAVA, C, HTML, CSS, JavaScript, TypeScript
Tools: Unix, Bash, Version Control System (Git), REST APIs, JIRA Agile
Databases: SQL/NoSQL, MySQL, PostgreSQL, MongoDB
Libraries: Matplotlib, Numpy, Langchain, BeautifulSoup, Pyttsx3, FastAPI, ReactJS, Node.js, Express.js Tailwind CSS
DevOps: Jenkins, CI/CD, GitHub Actions, Docker, AWS (EC2, S3, EBS Amplify)
Embedded Systems & IOT: ESP32, Arduino, Embedded C, MicroPython, GPIO & Peripherals, UART

Experience

***Computer Society Tech Lead at* NIE IEEE Student Branch**   **May 2024 - Dec 2024**
- Lead the Computer Society of 90+ members while being a part of Executive Committee at NISB.
- Organized multiple technical events, including the flagship event Rubix 2024.
- Actively participated and won in events like IEEE Xtreme, Ankura, CodeMaze, Adroit, etc.

***Member at* Robotics Club**   **Nov 2023 - Jan 2025**
- Volunteered at Roborikishi, guiding over 100 school students in Mysuru about Robotics and Arduino.
- Worked with robotic equipment and Arduino and participated in robotics competitions, including Enigma-24 at Malnad College of Engineering, Hassan.

Projects

Mystery Animal Voice Game *(ESP32, Router, INMP441 I2S Microphone, MicroPython)*   **Sep 2024 - Oct 2024**
- Created an ESP32-powered Mystery Animal guessing game for Robotics Club@NIE, where user needs to guess the simulated animal by asking limited 20 yes/no questions using an INMP441 I2S microphone and Python backend.
- Designed an end-to-end pipeline where user questions are processed on a python server, evaluated against mystery-animal logic, and a response is returned to drive red/green LED indicators and buzzer-based audio feedback.
- Core game logic and interaction flow were adapted and derived from Google's Mystery Animal experiment (2017).
  https://github.com/googlecreativelab/mystery-animal

Clock using CircularLL_and_AIAssistant *(Python, LangChain, Cohere, Turtle, Tkinter)*   **Nov 2024 - Dec 2024**
- Developed a modular analog clock in Python using circular linked lists and OOP for precise cyclic timekeeping with a synchronized digital display.
- Created an interactive DevBuddy chatbot using LangChain-style RAG for project queries.
- Designed threaded architecture with Turtle (analog) and Tkinter (digital) for concurrent clock design.
  https://github.com/ArnavSharma2908/Clock-using-CircularLL_and_AIAssistant

Delhi Metro Transit Corporation and ChatBot *(Python, matplotlib, pyttsx, WeatherAPI, SQL)* **Oct 2022 - Jan 2023**
- Developed a Python-based metro guide providing route details, fare estimates, and travel times across about 230 stations using Matplotlib for mapping and MySQL for data storage.
- Incorporated METROBOT, an AI chatbot, for user queries, FAQ, and assistance.
- Designed real-time news, weather information along with in-chat Wikipedia access in Metrobot.
  https://github.com/ArnavSharma2908/Delhi-Metro-Transit-Corporation-and-Chatbot

Achievements

ICPC Regionalist – 2025 Asia West Amritapuri Multisite Regional Contest   **Nov 2025**
  Attained selection to the 2025 ICPC Asia West Amritapuri Multisite Regional Contest after clearing the qualifying rounds in one of the most prestigious competitive programming competitions worldwide.

2nd Position at CP (Competitive Programming) Potpourri, Shaastra Fest at IIT, Madras   **Jan 2025**
  Competed against the brightest minds nationwide and secured second place in the CP (Competitive Programming) Potpurri event at Shaastra '25 Techfest held at IIT Madras.