Monali Bhujbal

Bachelor of Technology
in Computer Engineering
Vishwakarma Institute of Technology, Pune

Contact: +91-7840932809
monalibhujbal496@gmail.com
LinkedIn: www.linkedin.com/in/monalibhujbal

Education

Degree	Institute	Board / University	CGPA/Percentage	Year
Btech	Vishwakarma Institute of Technology, Pune	SPPU	8.89	2023-2027
Secondary	Vijayamala Vidya Mandir School, Shirur	SSC	97.00%	2021

About me

Software-focused Computer Engineering student with experience in Java, C and SQL. Built projects ranging from AI-powered bots to Java-based desktop apps and IoT integrations. Strong grasp of DSA, OOP, and DBMS. Passionate about building practical, scalable, and impactful software systems.

Projects

- Commentary Bot (March 2024)
- Developed an AI-driven bot capable of generating real-time sports commentary using Natural Language Processing (NLP) and Machine Learning.
- Implemented context-aware sentence construction that mimics the tone and style of professional sports commentators.
- Designed the system to dynamically adjust tone and phrasing based on the real-time status of the match.
- Tech Stack consisted of Python, NLP libraries (e.g., spaCy, NLTK), machine learning models..

Expense Tracker Application (June 2024)

- Built a Java-based desktop application to manage and visualize personal financial data effectively.
- Implemented features such as category-wise spending analysis and a user-friendly interface for intuitive interaction.
- Designed the system to be lightweight, efficient, and ideal for students or households to monitor daily expenses.
- Tech stack consisted of Java (Swing/JavaFX), JDBC, MySQL Workbench, Object-Oriented Programming, File I/O.
- Smart Chessboard: An Automated Move Tracking System (Jan 2025)
- Developed an intelligent chessboard capable of tracking piece movements in real-time using embedded sensors and software integration.
- Integrated machine learning for move prediction using TensorFlow, and enabled remote multiplayer interaction via WebRTC.
- Designed the system to process sensor data and sync moves visually for remote users, bridging physical gameplay with digital tracking.
- Tech Stack included Python (TensorFlow), WebRTC (JavaScript), and hardware components NodeMCU, Hall Effect sensors, multiplexers.

Technical Skills

- Programming Languages: Java, C, SQL
- Tools and Frameworks: Html, CSS, JS
- CS Fundamentals : Data Structures and Algorithms, problem-solving, DBMS, OOP, OS.

Volunteering

- Event Coordinator – VIT Event Planning and Execution Committee: Assisted in organizing and managing college-level technical and cultural events by supporting logistics, guest coordination, and registration. Contributed to the seamless execution of on-ground operations.

Achievements

- Published Patents: “Automatic Chess Piece Move Detection and Validation Using Arduino Nano and Reed Switch” (App. No. 202521055419, Jul 2025) and *Unauthorized Driving Prevention System”* (App. No. 202521055424 A, Jul 2025).
- Published two research papers: *“IoT-Driven Robots: Revolutionizing Automation”* in IJERT and *“Smart Automated Table Cleaning Device”* in IEEE Xplore.
- School topper, Was awarded as the School topper for the year 2021 with 97.00%.
- Represented at the district level in badminton, won multiple school sports medals.