# ABHISHEK CHOUDHARY

### Noida, India

**J** +91-6002384956

abhi1312choudhary@gmail.com

LinkedIn

GitHub

LeetCode

#### Education

## VIT Bhopal University

2022 - 2026

B. Tech - Computer Science and Engineering: Artificial Intelligence-Machine Learning

Madhya Pradesh

CGPA: 8.68

#### TECHNICAL SKILLS

Languages: Java, Python, C++, SQL.

Developer Tools: Docker, VS Code, IntelliJ IDEA, Postman

Technologies/Frameworks: GitHub, Vercel, Render, Angular, Git, Spring Boot.

## **PROJECTS**

## Online Multiplayer Mancala Game 🔀 | Spring Boot, WebSockets (SockJS, STOMP)

In Progress

- Developing a full-stack Mancala game featuring both session-based multi-player and real-time online 2 player modes.
- Implemented robust bidirectional communication and game state synchronization using WebSockets (SockJS/STOMP) for seamless real-time play.
- Designed an interactive and responsive front-end with HTML, CSS, and JavaScript, ThymeLeaf enabling dynamic 14 pit board rendering and intuitive player actions.
- Engineered server-side game logic and state management, supporting game hosting, joining, and turn-based gameplay with complex rule enforcement.
- Containerized and deployed the application on Render for public access.

# AI-ML Based Food Preparation Prediction System 🗹 | Scikit-learn, Colab, Python

March 2025

- Developed a deep learning model using TensorFlow and Keras, achieving R<sup>2</sup> scores of 0.85–0.94 for multi-meal predictions across breakfast, lunch, and dinner.
- Generated 9000+ synthetic datasets capturing food correlations (e.g., rice with rajma) and performed robust preprocessing.
- Optimized neural networks with early stopping and hyperparameter tuning, scaling from single to full-day predictions using 25+ input features.
- Achieved highly accurate multi-meal predictions ( $R^2$  0.85-0.94), projecting a 15-26% increase in kitchen efficiency and a 18-25% reduction in food waste.

# Mess Management System 🗹 | SpringBoot, Angular, MySQL, Docker, Git

Nov 2024

- Engineered a centralized mess management system that automated record-keeping, billing, and menu updates, improving
  efficiency and reducing manual work for 6000+ students.
- Managed student records, bill tracking, and dynamic menus via 10+ RESTful APIs.
- Planned enhancements include automated fee reminders, and ML-driven food preparation prediction.
- Centralized mess operations, enhancing user experience, and reducing cost for 6000+ students and improving administrative efficiency by an estimated 16-24%.
- Containerized and deployed on Vercel(Frontend), Render(Backend) for seamless public usage.

# Breast Cancer Detection using CNN (Team of 5) 🗹 | Scikit-Learn, Colab, Python

Sept 2024

- Developed baseline ML models for breast cancer detection on 8,000+ CSV records.
- Enhanced detection accuracy using CNNs on 5,000+ medical imaging datasets.
- Achieved over 35-40% improvement in diagnostic accuracy compared to traditional ML.
- Delivered a highly reliable tool, significantly boosting diagnostic capabilities.

## **ACHIEVEMENTS**

- \* Solved 300+ questions on LeetCode, demonstrating strong problem-solving skills.
- \* Deployed all major projects to production environments, ensuring they are accessible and usable by anyone, showcasing end-to-end development and deployment expertise.

#### **CERTIFICATIONS**

- Applied Machine Learning with Python Used in Food Prediction Project.
- Intermediate Machine Learning Used in Food Prediction Project.

\_