# Om Jalindar Barvekar

## Summary

Motivated and detail-oriented AI & Software Engineer skilled in developing intelligent automation systems and modern desktop applications. Experienced in JavaFX, MySQL, and full-stack desktop development with database integration and clean MVC architecture. Certified by EDC—IIT Delhi in AI Tools, Data Analytics, and Product Management. Passionate about combining AI, robotics, and software engineering to build scalable solutions.

### Technical Skills

Programming Languages: Python, Java, C, JavaScript

Application Development: JavaFX, MySQL, JDBC, Maven, SceneBuilder AI & ML: OpenCV, TensorFlow, YOLO, Scikit-learn

Frameworks: Flask, Node.js, React

Hardware & IoT: Raspberry Pi, Jetson Nano, Arduino

Tools: IntelliJ IDEA, VS Code, Git, Linux, AWS (Basic)
Soft Skills: Problem Solving, Collaboration, Product Management

## **Projects**

### Vybe Ride — JavaFX Ride-Sharing App

Java, JavaFX, MySQL, JDBC, Maven

GitHub Link

Developed a full-featured desktop ride-sharing prototype with login/signup modules, MySQL connectivity, and FXML-based UI. Implemented MVC architecture, user validation, and smooth navigation between scenes.

### AI-Based Autonomous Navigation System

GitHub Link

Python, OpenCV, TensorFlow, YOLO, Raspberry Pi

Built an AI-powered robot for real-time object detection and path planning using YOLOv5 and A\* algorithm. Integrated live camera feeds and ultrasonic sensors for dynamic obstacle avoidance.

### Real-Time Vehicular Accident Detection & Emergency Response System

GitHub Link

Python, ML, IoT Sensors, GSM/GPS

Designed an ML-driven accident detection model with GSM alerts and GPS tracking for emergency notifications.

Portfolio Website Live Demo

React, HTML, CSS, JavaScript, Vercel

Created and deployed a responsive portfolio showcasing projects and technical skills in a clean layout.

## Work Experience

### Intern — Labrantics (AI/ML, Remote)

Jun 2025 – Present

Developed ML-based data pipelines and automation scripts for data processing and predictive modeling. Worked on data visualization and accuracy optimization.

#### Intern — Blackbug Solutions Pvt. Ltd., Pune

Mar 2023 - Jan 2024

Assisted in developing drone automation and IoT sensor networks. Collaborated with engineers on testing embedded modules and control systems integration.

### Education

### B.E. in Computer Engineering — PDEA College of Engineering, Manjari (Pune)

2022 - Present

GPA: 7.5 / 10.0

Class 12th (HSC) — 75%

2022

Class 10th (SSC) — 91.8%

2020

## Achievements & Certifications

Certified by EDC-IIT Delhi in Artificial Intelligence Tools, Data Analytics, and Product Management.

Received a Letter of Recommendation (EDC-IIT Delhi) for excellence in AI-based research.

Completed "AI is the Future" and "Self-Made Millionaire Program".

Recognized for leadership and teamwork in AI-driven automation projects.

Last Updated: October 19, 2025