# Purvesh Sanjay Mali

Bachelor of Engineering
Progressive Education Society's Modern College of Engineering, Pune 5

📞 +91-9822628048
✉ purveshmali99@gmail.com
⊙ GitHub
in LinkedIn
🌐 Portfolio
</> LeetCode

## EDUCATION

•**Bachelor of Engineering in Artificial Intelligence and Data Science**  *2024-27*
*Progressive Education Society's Modern College of Engineering, Shivajinagar,Pune 5*  CGPA: 9.27

•**Diploma in Computer Engineering**  *2021-24*
*Government Polytechnic, Jalgaon*  Percentage: 89.26

•**SSC 10th Boards**  *2021*
*Late.G.N.C Madhyamic Vidyalay, Jalgaon*  Percentage: 95.80

## PERSONAL PROJECTS

•**Arjuna-AI (ISRO)**  *August 2025*
*Nationwide Cloud-Based Air Quality Prediction Platform*

- **Engineered** a nationwide AI platform to predict and visualize real-time air quality, processing **9GB INSAT satellite data** with a Random Forest model to achieve **85%+** accuracy
- **Architected** a robust, end-to-end MLOps pipeline using **Python** and **Flask** that automated data ingestion, preprocessing, and model serving, reducing manual intervention by **35%**.
- **Deployed** the system on a cloud infrastructure using **Docker** for containerization and **Kubernetes** for orchestration, ensuring high availability and scalability to handle nationwide requests.
- **Applied** SHAP-based model explainability (XAI) to provide transparent and interpretable prediction insights, enhancing model trust and diagnostic capabilities.

•**Power Choice**  *May 2025*
*Power Plants Emission Prediction System.*

- Trained a predictive model with **92%** accuracy to forecast power plant emissions, demonstrating a potential **22%** improvement in impact analysis.
- It is a full-stack MERN application with a Flask back-end for the machine learning component.
- Designed a comprehensive React dashboard to display real-time data and actionable environmental insights.
- Technology Used: ML, ReactJS, MongoDB, Flask, NodeJS

•**RideEase**  *September 2025*
*Uber Like Ride Booking Application.*

- Developed a MERN stack-based ride-hailing application with real-time ride booking and tracking functionality.
- Integrated the HTML5 Geolocation API and implemented a route optimization algorithm to find the most cost-effective routes for users.
- Implemented a machine learning-based recommendation engine for drivers.
- Technology Used: ReactJS, NodeJS, ML, Microservices

## EXPERIENCE

•**UI/UX Designer Internship**  *Oct 2024 - Mar 2025*
*Simplesphere Marketing*  Remote
- Created a complete 12+ screen mobile application prototype in Figma for 'BiteUp', a food delivery startup.
- Crafted an intuitive user experience, including home, cart, payment, and filter screens, incorporating animations to enhance usability.
- Managed the end-to-end design process for a client project, from concept wireframes to high-fidelity mockups.

•**Full-Stack Web Developer Training(Python)**  *June - July 2023*
*Sumago Infotech Pvt.Ltd.*  On-Site
- Executed a full-stack ToDo application using Python and Django, demonstrating core web development principles.
- Constructed the back-end to manage task data, handling all Create, Read, Update, and Delete (CRUD) operations.
- Built a responsive front-end interface with HTML, CSS, and JavaScript to interact with the Django back-end.
- Applied RESTful API principles to manage task data effectively.

## Technical Skills

**Languages**: Java, C++, Python, JavaScript, SQL, PHP
**Frameworks  Libraries**: React.js, Next.js, Node.js, Express.js, Flask, Django, Redux, Tailwind CSS
**Cloud  DevOps**: AWS (EC2, S3, RDS), Docker, Kubernetes, GitHub Actions (CI/CD), NGINX
**Databases**: MySQL, PostgreSQL, MongoDB, Firebase, Supabase, SQLite
**Developer Tools**: Git, GitHub, Postman, VS Code, Linux/Unix Command Line
**Core Concepts**: Data Structures  Algorithms, OOP, OS, DBMS, System Design, Computer Networks
**Interests**: Full-Stack Development, Machine Learning, UI/UX Design, Cloud Architecture

## Extra Curricular & Certifications

- **Cyber Job Simulation** Deloitte Technology                                                    *June-2025*

  – Detected the source of a data breach and answer questions to identify suspicious user activity.

- **Generative AI Professional Certification** Oracle                                   *Sept 2025 - Ongoing*

  – Developing skills in generative AI fundamentals, large language models (LLMs), prompt engineering, and utilizing Oracle's GenAI services.

## Achievements

- **Hackathon Finalist (Top 3%)**: Ranked **6th** out of 236+ teams at a 36-hour VIT Pune hackathon, earning a direct internship interview opportunity.

- **SIH 2025 Finalist (Top 17%)**: Secured **25th position** among 150 teams in the internal selection round for the Smart India Hackathon (SIH) 2025.

- **Hackathon Winner (1st Place)**: Won a 7-hour hackathon at Dr. D. Y. Patil Inst. of Technology by demonstrating rapid, effective problem-solving under pressure.