Raj Mate

Pune, Maharashtra 411014
7744996969
rajmate032004@gmail.com
WWW: https://github.com/raj3104
WWW: linkedin.com/in/raj-mate-616543251

Profile

Machine Learning Intern at Karage Robotics, selected after winning the Ideathon at NIT Bhopal. Skilled in iOS development using Swift, with experience building a predictive pest management system. Contributed to smart agriculture projects through hands-on work in ML, mobile development, and data integration.

Skills

- IOS Development
- Swift
- Java
- Android Development
- 3D Modelling
- SwiftUI

Internships

April 2025 to September 2025

Karage Robotics
Machine Learning Intern

- Attained 1st place at Ideathon, NIT Bhopal (top 5% of 200+ teams); selected for internship at Karage Robotics.
- Constructed a predictive model within the ML-powered software, enabling precise pesticide application, resulting in a significant reduction in environmental impact by 25% compared to traditional methods.
- Secured 30%+ reduction in pesticide use through predictive pest detection, advancing smart agriculture efficiency.
- Crafted **a real-time monitoring system** that tracks soil health and pest activity, improving crop management strategies and decreasing pesticide reapplication by **15%**.
- **Collaborated with local farmers** to conduct a pilot program, validating model accuracy and improving pesticide application timing, leading to a **20% increase in crop yield**.

Achievements

- **Won SolVIT Hackathon at VIT Bhopal** (Top 1 of 100+ teams) for building a hospital resource forecasting system using ARIMA and XGBoost.
- **Improved allocation efficiency by 40%** with a predictive backend and real-time patient tracking via a custom iOS app.
- Enabled **95% accuracy** in demand forecasting, reducing under/overstaffing incidents and boosting operational planning.
- The system's predictions were validated with **95% accuracy**, resulting in enhanced capacity planning and patient care quality.
- **Won Ideathon at NIT Bhopal** (Top 1 of 200+ teams) for prototyping an ML-based automated pesticide management system.
- Built a mobile app for spray tracking, boosting data accuracy and traceability for field operations.
- Improved operational traceability, with **100% accuracy** in tracking pesticide usage across different locations.

Education

Expected in June 2026	**VIT Bhopal University** Bhopal Specialization in Gaming Technology B Tech Cumulative CGPA :- 7.85/10
April 2022	**NPPS** Kolhapur Physics, Chemistry, Mathematics, Computer Science Senior Secondary Percentage :- 82%
April 2020	**Lexicon International School** Pune Secondary Percentage :- 79%

Projects

- **Designed "Mess Food Monitoring" app** (Jan–Mar 2025) for hostel students at VIT Bhopal; built time-triggered UI to auto-display meals, cutting manual checks by **100%**.
- Integrated real-time updates and feedback system; collected **200+ responses**, enhancing features and satisfaction for **500+ users**.
- **Engineered a live weather app** using Xcode Swift and REST APIs; integrated **3+ data sources** for accurate global forecasts.
- Served **5,000+ cities** with less than 2s response time; hit **1,000+ downloads** in month one and earned a **4.5 rating** from **500+ reviews**.
- **Created a real-time news app** in Android Studio with **5+ integrated sources** for diverse coverage.
- Added personalized feeds, boosting daily active users by **35%**; reached **3,000+ downloads** and a **4.7★ rating** from **1,200+ reviews**.