# **ROHAN PADHYE**

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#### PROFESSIONAL SUMMARY

Detail-oriented and results-driven Software Developer with a strong foundation in programming, data science, and cloud technologies. Proven track record in designing, developing, and deploying scalable applications across diverse domains, from education tech to IoT & fraud detection. Adept at collaborating in cross-functional teams, mentoring peers, & delivering innovative solutions that improve performance, usability, & efficiency.

#### **EDUCATION & CERTIFICATIONS**

MSc Computer Science (GPA: 4.0) – Western University, Canada (Sep 2023 – Aug 2024) B.E. Information Technology (GPA: 3.8) – Mumbai University, India (Jul 2019 – Jun 2023) AWS Cloud Technical Essentials – AWS, Coursera (July, 2025) (*View Certificate*)

#### **TECHNICAL SKILLS**

- Languages: Python, C++, JavaScript, SQL, HTML, CSS, React
- Data Science & ML: Pandas, NumPy, Scikit-Learn, Seaborn, Data Mining, Visualization, Classification, Regression, Clustering
- Backend & Databases: Flask, Django, Firebase, MySQL, WebSockets
- DevOps & Cloud: AWS (EC2, S3, Lambda), Docker, Podman, Jenkins, GitHub Actions
- Tools: VS Code, JIRA, Figma, Excel, Power BI, Tableau

#### PROFESSIONAL EXPERIENCE

## Wireless Consultant - Staples Canada | London, ON (Oct 2023 - Mar 2025)

- Provided personalized wireless plan and device recommendations based on customer usage patterns, budget, and technical needs, helping customers make informed decisions in a competitive market.
- Consistently surpassed monthly sales targets by 15–20% through proactive upselling, cross-selling, and effective follow-up with repeat customers.
- Assisted customers with end-to-end device setup, including SIM activation, data transfer, email configuration, and app installation, ensuring smooth onboarding for both personal and business clients.
- Troubleshot device and connectivity issues on the spot, resolving over 90% of cases without escalation.
- Maintained up-to-date knowledge of mobile carriers, device specifications, promotional offers, and competitive market trends to ensure recommendations were always relevant and value-driven.
- Collaborated with sales associates and management to optimize workflow, improve store KPIs, and maintain a customer satisfaction rating above store average.

# Teaching Assistant – Western University | London, ON (Jan 2024 – May 2024)

- Led weekly lab sessions for over 100 undergraduate students in Java programming, guiding them through concepts like object-oriented programming, algorithm analysis, recursion, and data structures.
- Provided one-on-one assistance during labs, helping students debug code, optimize solutions, and strengthen their problem-solving skills.
- Reviewed and graded assignments, ensuring fair evaluation and offering detailed feedback to help students improve code efficiency and readability.
- Supported academic integrity by monitoring lab submissions and ensuring adherence to coding standards and best practices.

# Frontend Developer Intern - Coursenator | Mumbai, IN (Mar 2022 - Jul 2022)

- Designed and developed reusable React components to standardize UI elements and improve development efficiency across the platform.
- Integrated multiple backend APIs using React Query, reducing redundant network requests by 20% and improving page load speeds.
- Implemented responsive layouts using Tailwind CSS, ensuring seamless performance across desktop, tablet, and mobile devices.
- Optimized data fetching processes with Axios to decrease API latency and improve user experience.
- Collaborated closely with backend engineers to refine API endpoints, enabling smoother data flow and reducing client-side complexity.
- Participated in weekly Agile sprints, contributing to feature planning, testing, and deployment.

#### Software Developer Intern - Virtual Labs, IIT Bombay | Mumbai, IN (Jul 2021 - Dec 2021)

- Developed a Python-based educational web application for interactive math problem generation using Flask, NumPy, and SymPy.
- Created a dynamic problem-generation engine that could produce multiple variations of math questions for automated practice.
- Built intuitive front-end interfaces, ensuring accessibility for high school and undergraduate students with varying technical skills.
- Deployed the application using Docker for containerization and Heroku for cloud hosting, enabling easy scalability and maintenance.
- Integrated Pandas for dataset manipulation and Matplotlib for interactive graph plotting, enhancing the learning experience through visualizations.
- Worked in close coordination with educators to align software functionality with curriculum needs.

# Web Editor - Computer Society of India, VESIT Chapter | Mumbai, IN (May 2020 - Jun 2021)

- Designed, developed, and maintained the organization's official website using ReactJS, Tailwind CSS, and Vercel hosting.
- Managed site updates, event pages, and member portals, ensuring accurate and timely information for over 500 members.
- Coordinated with the events team to promote workshops and hackathons, increasing participation rates by 30%.
- Organized and delivered workshops on Machine Learning, Web Development, and DevOps, training 120+ students in hands-on technical skills.

#### **PROJECT HIGHLIGHTS**

#### MiGrror Live Migration Framework (View On GitHub)

- Developed a container live migration system using CRIU, Podman, and Python to reduce downtime by **20**% for latency-sensitive edge computing workloads.
- Implemented incremental checkpointing and pre/post-copy migration strategies to minimize service disruption.
- Tested on Raspberry Pi and university servers, enabling portability for IoT devices with limited resources.
- Tools & Tech: Python, CRIU, Podman, rsync, watchdog, Bash scripting.

# Smart Door Lock (Facial Recognition) (View On GitHub) (View on IEEE)

- Designed a secure, automated door access control system using Raspberry Pi, Python (OpenCV), and Flask backend.
- Integrated SQLite database for storing user profiles and real-time access logs with >95% recognition accuracy in varying lighting conditions.
- Published in IEEE for contributions to IoT-based security; presented at ICEPE 2023, NIT Meghalaya.
- Tools & Tech: Raspberry Pi, OpenCV, Flask, SQLite, HTML/CSS, JavaScript.

# Bank Fraud Detection System (View On GitHub)

- Built a fraud detection pipeline achieving 96.78% accuracy using Decision Tree classification on a financial transactions dataset.
- Preprocessed 250,000+ records with feature engineering to detect anomalies and reduce false positives.
- Secured 1st place at Syberthon Hackathon for delivering a scalable and high-performance model.
- Tools & Tech: Python, Pandas, NumPy, Scikit-Learn, Matplotlib.

#### FMCG Market Analysis Tool (View On GitHub)

- Developed a Streamlit web app for demand forecasting using Random Forest & Linear Regression models with >85% accuracy.
- Built SQL database to track inventory, sales, and customer analytics for 5+ product categories.
- Designed interactive dashboards to visualize sales trends and optimize restocking decisions.
- Tools & Tech: Python, Streamlit, SQL, Plotly, Pandas, Scikit-Learn.

### Earth Hour - Eco-Friendly Marketplace (View On GitHub)

- Led the development of a full-stack marketplace for eco-friendly products, boosting scalability and increasing user engagement by **35**% through optimized ReactJS components and efficient backend architecture.
- Implemented real-time data storage with Firebase Firestore, secure payments via Razorpay, and robust authentication using Firebase Auth.
- Collaborated in an Agile environment using Git for version control and deployed using Node.js backend services.
- Tools & Tech: ReactJS, TMDB API, Firebase, Node.js, CSS Modules, Tailwind CSS, Redux, React Router, Firebase Auth.

# **Library Management System** (*View On GitHub*)

- Created a desktop application to manage 1,000+ books and 300+ members with real-time due date alerts and fine calculation.
- Implemented MVC architecture and used Log4j for logging and Apache Commons for utilities.
- Tools & Tech: Java, JavaFX, Swing, MySQL.

# **LEADERSHIP & ACHIEVEMENTS**

- Technical Manager, E-Cell VESIT Led events for 600+ students including hackathons and seminars.
- Volunteer Supported COVID-19 awareness and educational initiatives for underprivileged communities.
- Awards 1st place, Syberthon Hackathon; 2nd place, Project DeepBlue Hackathon.