Pratik Kamath

✉ pratikkamath2000@gmail.com ⬦ ⌨ github.com/pratik-kamath ⬦ 🔗 linkedin.com/in/pratik-kamath

Education

Master of Information Technology *June 2025*
University of New South Wales *Sydney, Australia*
- **Distinction** WAM in core courses such as **Advanced Machine Learning**, **Data Structures and Algorithms**.

Bachelor of Technology in Computer Engineering *May 2022*
NMIMS – Mukesh Patel School of Technology Management and Engineering *Mumbai, India*
- **High Distinctions** in core courses including **Artificial Intelligence**, **Theoretical Computer Science**, and **Software Engineering**.

Experience

Software Engineering Intern *Oct 2025 – Present*
Mark Computers *Mumbai, India*
- Building an enterprise-grade **Fuel Retail Management System** using **ASP.NET Core**, **MS SQL Server**, **Bootstrap**, and **jQuery** to digitise operations across POS, accounting, HR, and inventory for **multi-station petrol pump networks**.
- Integrated **Multi-Product Dispenser (MPD)** hardware to capture **real-time fuel sales** and shift-wise meter readings, reducing manual log errors by **90%** and automating reconciliation across **20+ operational workflows**.
- Role-based access control for **10+ employee roles**, improving end-to-end operational visibility.

Software Engineering Intern *May 2021 – Jul 2021*
L&T Realty *Mumbai, India*
- Engineered a **full-stack web application** using **Python (Flask)**, **HTML/CSS**, and **JavaScript** to predict real estate prices across **5000+ property listings**, integrating **RESTful APIs** for dynamic model querying and visualization.
- Developed and fine-tuned **Random Forest** and **Gradient Boosting** models with **scikit-learn**, achieving **92% prediction accuracy**, and managed data storage and querying using **PostgreSQL** for real-time analytics.
- Built interactive dashboards with **Plotly Dash** and **Seaborn**, containerized the application using **Docker** for isolated development environments, and handled **1,000+ API requests per day** during internal testing.

Projects

CeleStE Conference Management System [GitHub] *April 2025*
- Led a 6-member Agile team as **Product Owner** to deliver a scalable conference management system with a **React** web dashboard and **React Native mobile app** featuring session bookings, chat, Q&A, QR ticketing, and analytics.
- Architected backend using **Node.js** with microservices-inspired structure; deployed with **Docker** and integrated with **MongoDB**, **Redis**, **NATS**, and **JWT-based** authentication.
- Enabled over-the-air updates for mobile via **Expo**, and implemented real-time messaging using WebSockets and pub-sub with **NATS**.

Published Research: Stock Price Forecasting with Neural Networks [Read Paper on IEEE Xplore] *Jan 2022*
- Published in **IEEE ICONAT 2022** on forecasting S&P 500 stock prices using **ARIMA**, **CNN**, **LSTM**, and **BiLSTM**.

Technical Skills

- **Languages:** Python, JavaScript, TypeScript, SQL, Java, C, C++
- **Web & Backend:** Node.js, Flask, Django, FastAPI, REST APIs, GraphQL, JWT Authentication, Microservices
- **Frontend:** React, HTML5, CSS3, Tailwind, Redux Toolkit
- **Databases:** MySQL, PostgreSQL, MongoDB, Redis
- **Automation & Integrations:** n8n, Webhooks, API Integrations, Workflow Automation
- **Cloud & DevOps:** AWS (basic), Azure (basic), Docker, CI/CD (basic)
- **Tools & Platforms:** Git, GitHub, VS Code, Cursor, Jupyter, OpenAI API, LangChain, MCP (Model Context Protocol)
- **Software Engineering:** OOP, Data Structures, Algorithms, System Design (basic), Version Control, Agile