

Rahul Manjunath Pudurkar

rpudurka@syr.edu | +1 (315)-880-1720 | [GitHub](#) | [LinkedIn](#) | [Portfolio](#)

EDUCATION

Syracuse University | *Master of Science, Computer Science* | *Syracuse, USA* **Aug 2023 - May 2025**
Courses: Design and Analysis of Algorithms, Mobile Application Programming, Machine Learning, Database Management Systems, Operating Systems, Object-Oriented Design, Computer Architecture, Data Mining

University of Mumbai | *Bachelor of Engineering, Computer Engineering* | *Mumbai, India* **Aug 2017 - Jun 2021**
Courses: Software Engineering, System Design, Natural Language Processing, Data Structures, Artificial Intelligence, Distributed Systems

PROFESSIONAL EXPERIENCE

Research Intern | *Syracuse University* | *Syracuse, USA* **Jun 2025 - Present**

- Building a **full stack** voice authentication system using **ReactJS**, **Tailwind CSS**, **Flask**, and **MongoDB**, implementing secure login with **Supabase** and designing **UI/UX** prototypes in **Figma**
- Trained speaker verification and **spoof detection models** with **PyTorch**, **TensorFlow**, **Scikit-learn**, and **XGBoost**, using **NLTK** and **audio augmentation** for robustness, and visualizing performance with **Matplotlib** and **Google Analytics**

Software Engineer | *Syracuse University CASE Co-op Program* | *Syracuse, USA* **Dec 2023 - Aug 2024**

- Restructured **Node.js/Express.js** services into **Dockerized Kubernetes containers** and developed **APIs** using **Go**, improving API response times by 45%, reducing latency by 40%, and cutting infrastructure costs by 15%
- Devised a **hybrid data layer** with **MongoDB**, **Amazon RDS**, and **PostgreSQL** alongside secure **AWS S3 object storage** sustaining 120% user growth at 99.9% uptime
- Revamped UI/UX using **TypeScript** and **WebSockets**, reducing load times by 70% and increasing user engagement by 30%
- Automated **CI/CD pipelines** with **GitHub Actions**, **Jenkins**, and **Vercel**, cutting deployment time by 60%, and implemented Vercel's **multi-layered security** including automatic **HTTPS** and **DDoS protection**
- Migrated ReactJS codebase to **React Native** for **Android** and **iOS** applications, improving app performance and increasing user retention by 25% through **native** optimizations
- Achieved **95% test coverage** using **Jest-driven TDD**, leveraging **Python**, **Scikit-learn**, and **Matplotlib** to analyze user behavior, refined **recommendation algorithms**, and improving **database** performance by 55%
- Enhanced **application security** by implementing **JWT authentication**, **OAuth 2.0**, and **event-driven architecture**, reducing unauthorized access attempts by 40%

Software Engineer | *Dure Technologies* | *Mumbai, India* **Apr 2021 - Jun 2023**

- Pioneered development of '**iMonitorPlus**' **full-stack app** with **JavaScript**, **ReactJS**, and **Apache Cordova**, enabling **real-time data collection** in 35+ countries and increasing revenue by 16%
- Integrated **Firebase Realtime database** with **notification** services, improving **data storage**, scalability, and user engagement
- Engineered **RASA AI voice assistant** with 1K+ keywords for TB, aiding 40K+ health workers and saving \$73K annually
- Optimized app performance using **async operations** and **lazy loading**, reducing app size by 72%
- Led cross-functional teams and implemented secure **data visualization architecture** with **RBAC** and **Google Analytics**, supporting 5K+ users, improving decision-making by 40% and reducing project delivery time by 25%

PROJECTS

Task Management System | *Java, Spring Boot, MVC, MongoDB, Gradle, RESTful APIs, ReactJS* **Oct 2024 - Nov 2024**

- Designed **Java** backend **CRUD** operations with **MongoDB**-integrated APIs, reducing response times by 50%, maintaining 99.9% uptime, and cutting server overhead by 40%
- Developed React Frontend with **RESTful API** Integration, enabling **real-time** task updates, reduced **latency** by 50%, and delivering a Trello-inspired interface

FoodPunk Mobile Application | *Flutter, Firebase, Dart, Stripe Payment Gateway* **Mar 2024 - Apr 2024**

- Constructed a **cross-platform** food delivery app using **Flutter**, **SQL Server**, and **Stripe API**, enabling real-time tracking, **secure logins**, **notifications**, and seamless payments, boosting engagement by 40% and reducing queries by 30%
- Streamlined UI Performance with **Dart Async Programming**, implementing lazy loading, **caching**, and **Flutter widgets**, increasing response speed, reducing load latency by 45%

TECHNICAL SKILLS

Programming Languages: Java, Python, JavaScript, TypeScript, SQL, HTML, CSS, Dart, XML, Haskell, Golang

Frameworks & Libraries: React.js, Node.js, Express.js, Spring Boot, jQuery, Ionic, Apache Cordova, Jest, Flutter, Swift, Matplotlib, Scikit-learn, TensorFlow, PyTorch, XGBoost, OpenCV, NLTK

Tools: Jenkins, Docker, Kubernetes, Postman, Vercel, AWS (EC2, S3, RDS), Android Studio, Xcode, PyCharm, IntelliJ IDEA, Google Analytics, Linux, Git, GitHub Actions

Databases: MongoDB, PostgreSQL, MySQL, SQL Server, Firebase, Supabase

DevOps & Other Technologies: CI/CD Pipelines, REST APIs, Figma, WebSocket, Adobe XD, JIRA