# Prerana A Shetty

Mobile: +91-9535850291 | Email: preranashetty85@gmail.com | LinkedIn: linkedin.com/in/prerana-a-shetty
GitHub: github.com/shettyprerna2607 | Indrali, Karnataka 576104

## Professional Summary

- Computer Science student with a focus on Java Full-Stack and Flutter App Development, and practical experience in IoT hardware-software integration.
- Hands-on experience building functional, real-time applications, including a P2P learning platform (SkillChain), a healthcare app (MediConnect), and a health-monitoring wearable.
- Proficient in using Spring Boot, React, Flutter, and Firebase to implement real-time data synchronization, secure authentication, and cloud deployment.

## Skills

- **Languages:** Java, Dart, C++, JavaScript, HTML/CSS, Kotlin, C#
- **Frameworks:** Flutter, Spring Boot, Spring Security (JWT), React.js, Tailwind CSS
- **Backend & APIs:** REST, WebSockets (SockJS/STOMP), MQTT, Gemini AI API, OAuth2, Axios
- **Databases & Cloud:** PostgreSQL, Firestore, Firebase Auth, MySQL, MongoDB, Docker, Render

## Education

**Shri Madhwa Vadiraja Institute of Technology and Management (SMVITM)**, Udupi, Karnataka
Expected June 2026
B.E. in Computer Science and Engineering                                    CGPA: 7.28/10

**Relevant Coursework:** C, Python, Java (OOP), Data Structures and Algorithms (DSA), DBMS, Software Engineering and Project Management, Research Methodology, Web Development

## Projects

**Wearable IoT Device for Memory Loss** | View GitHub
*Technologies: Microcontrollers, Sensors, C++, Flutter, Dart, Firebase Realtime DB*

- Developed an IoT wearable featuring biometric health monitoring, GPS tracking, fall detection, and pill reminders using microcontrollers programmed in C++.
- Enabled real-time observation and automated caregiver alerts through a companion mobile application synchronized via Firebase Realtime Database.
- Integrated diverse sensor interfaces to provide comprehensive health telemetry and historical data tracking for patients with temporary memory loss.

**SkillChain — P2P Learning Platform** | View GitHub
*Technologies: React.js, Tailwind CSS, Java Spring Boot, PostgreSQL, JWT, Gemini API, Docker, Render*

- Developed a "knowledge barter" platform with a modern Glassmorphism UI and a containerized full-stack architecture.
- Implemented real-time P2P communication and community chats using SockJS and STOMP protocols over WebSockets.
- Secured user authentication with Spring Security and JWT; integrated Gemini AI to generate personalized learning roadmaps and quizzes.
- Deployed the production-grade application on Render.com using Docker for seamless environment consistency.

**MediConnect — Healthcare App** | View GitHub
*Technologies: Dart, Flutter, Firebase (Auth, Firestore, FCM), State Management (Streams)*

- Developed a real-time health dashboard utilizing Firestore Streams for live synchronization of vitals, blood pressure, and heart rate data.
- Integrated Firebase Cloud Messaging (FCM) and local notifications to provide automated appointment alerts and health reminders.
- Built a Digital Medical Vault for secure record storage and a one-tap Emergency SOS feature with direct ambulance dialer integration.
- Developed a suite of health utilities, including a Symptom Checker, BMI Calculator, and Water Intake Tracker using reactive state management.

## Achievements

- **Winner, Avishkar, NITK Surathkal (1st Place)** | View Certificate
    - Awarded for innovative project pitch, strong presentation skills, and technical problem-solving.
- **3rd Place, State Model Pitching, SDM College Dharwad** | View Certificate
    - Recognized for a practical, implementation-focused project and technical pitching excellence.
- **Top 75, Sanraksha, IIT Bombay** | View Certificate
    - Selected from 300+ teams for national-level solution pitch and expert feedback session.
- **1st Place, Social Innovation Prototype, Comedkares, SMVITM** | View Certificate
    - Developed a creative and impactful social innovation prototype during a competitive event.
- **Top 10, Smart Nitte Hackathon, Nitte College** | View Certificate
    - Developed the MediBot healthcare assistant; recognized for teamwork and full-stack execution.