

# Manpreet Singh

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## Education

<b>Wilfrid Laurier University</b> Master of Applied Computing (Co-op)	Sep 2025 – Apr 2027 GPA: 11 / 12
<b>Chitkara University</b> Bachelor of Engineering (Computer Science)	Jul 2021 – Aug 2025 GPA: 9.23 / 10

## Work Experience

<b>CoreAI Technologies</b> <i>Software Developer</i>	Jun 2025 – Dec 2025 Remote
<ul style="list-style-type: none"><li>Engineered a real-time Dashboard UI using <b>Next.js</b> and <b>TanStack Query</b> to visualize 15+ biomarkers with customizable pinning, target-setting, and interactive charts tracking recent entries.</li><li>Developed Health Snapshot categorization system organizing biomarkers across blood, cardiovascular, and performance metrics with detailed information pages, simplifying health tracking workflows.</li><li>Enhanced production Android Smart Lock application in <b>Kotlin</b> using <b>Seam SDK</b>, implementing 2 new features and resolving 15+ bugs across NFC door access, thermostat control, and guest-pin management.</li></ul>	

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<b>SalesCode.ai</b> <i>Software Engineer Intern</i>	Jun 2024 – Dec 2024 Gurugram, India
<ul style="list-style-type: none"><li>Developed geo-targeted advertisement banner system using <b>Spring Boot</b>, custom <b>Flutter</b> widgets, <b>MySQL</b>, and <b>AWS EC2</b> deployment, increasing click-through rates by 15% across 100K+ sales reps.</li><li>Optimized <b>Flutter</b> app performance through widget refactoring and lazy loading patterns, reducing memory footprint from <b>89MB</b> to around <b>62MB</b>, improving overall app performance.</li><li>Collaborated with 5 engineers in <b>Agile</b> sprints to deliver 5+ production <b>Flutter</b> features, implementing <b>unit tests</b> and incorporating code review feedback reducing post-release bugs.</li></ul>	

## Projects

<b>Qure</b>   <i>Frontend   Backend</i>	<b>Node.js, Express.js, React Native, PostgreSQL, Socket.IO, Redis, Docker</b>
<ul style="list-style-type: none"><li>Developed full-stack clinic queue management system with <b>Node.js/TypeScript</b> backend, <b>React Native</b> mobile app, and role-based access supporting patient, staff, and administrator workflows with <b>JWT</b>-based authentication.</li><li>Engineered real-time queue system using <b>Socket.IO</b> room-based architecture for instant updates and implemented fault-tolerant token management using atomic <b>PostgreSQL</b> transactions to prevent race conditions.</li><li>Built asynchronous job processing pipeline using <b>BullMQ</b> and <b>Redis</b> for <b>Cloudinary</b> image uploads, containerized with <b>Docker</b> and <b>Docker Compose</b> for local development, and deployed to <b>Render</b> cloud platform.</li></ul>	

<b>MyTrackr</b>   <i>Source Code</i>	<b>Java, XML, Android, Firebase, Gemini SDK, ML Kit, Cloudinary</b>
<ul style="list-style-type: none"><li>Developed Android expense tracking app using <b>ML Kit</b> OCR and <b>Gemini AI</b> for automated receipt scanning, reducing manual data entry time by 80% and improving expense categorization accuracy.</li><li>Implemented automated budget tracking with real-time expense aggregation, multilingual support, CSV/PDF export, and cloud-synced receipt storage, simplifying financial management for users.</li></ul>	

<b>Study Adda</b>   <i>Demo   Source Code</i>	<b>React.js, MongoDB, Express.js, Node.js, Javascript</b>
<ul style="list-style-type: none"><li>Built student and instructor portal LMS using <b>React.js</b>, <b>Node.js</b>, <b>Express.js</b>, and <b>MongoDB</b> with <b>JWT</b> auth, <b>Razorpay</b> payments, video streaming, instructor analytics, and time-based discounts.</li><li>Implemented course creation, enrollment tracking, progress monitoring, and <b>Cloudinary</b> media management.</li></ul>	

## Technical Skills

**Languages:** Java, JavaScript, TypeScript, Python, Kotlin, C++, SQL, Bash/Zsh

**Frameworks & Libraries:** React.js, Next.js, Node.js, Express.js, React Native, Flutter, Spring Boot, Android SDK, Tanstack Query

**Databases:** PostgreSQL, MongoDB, Firebase, Redis

**Tools & Technologies:** AWS (EC2, S3, ECR), Docker, Git, Jira, Slack, Word, Excel

**Core Competencies:** RESTful API Design, Real-time Systems, Mobile Development, Microservices Architecture, Database Design, Data Structures & Algorithms, Object-Oriented Design, Unit Testing (Junit & Jest)