Samarth Goel

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EDUCATION

Northeastern University   Boston, MA
Master of Science in Computer Science; GPA: 3.3/4.0   *Jan 2025 – May 2027*
- Coursework: Algorithms, Object-Oriented Design, Distributed Systems, Cloud Computing

SRM University   Chennai, India
Bachelor of Technology in Computer Science; GPA: 8.41/10.0   *Graduated Jun 2024*

TECHNICAL SKILLS

Languages: Java, Python, TypeScript, JavaScript, C++, SQL, Go (familiar)
Cloud & Distributed Systems: AWS (EC2, S3, Lambda – familiar), Firebase, Microservices, REST APIs, CI/CD
Databases: MySQL, PostgreSQL, MongoDB, DynamoDB (familiar), Redis (familiar), Database Design
Tools & Practices: Git/GitHub, Docker, Agile/Scrum, Code Reviews, System Design, Monitoring/Debugging

EXPERIENCE

Software Engineer Trainee   Jul 2023 – Oct 2023
Unitech Pvt. Ltd   *Gurugram, India*
- Owned end-to-end development of automated tracking system using Python and SQL, taking full responsibility from design through deployment; reduced manual processing by 83% for 500+ monitored entities
- Designed scalable MySQL database architecture with 12+ tables and 20+ optimized indexes; improved query performance by 87% through algorithmic optimization and efficient data modeling
- Built fault-tolerant JavaScript dashboard processing 10,000+ records in real-time across 8 distributed data sources; implemented monitoring and alerting for operational excellence
- Collaborated with cross-functional teams in Agile environment; participated in code reviews and maintained technical documentation achieving 95% stakeholder satisfaction

PROJECTS

ProductivityPal – Distributed Mobile Application | *Swift, Firebase, Firestore, REST APIs* Nov 2025 – Dec 2025
- Designed and built scalable iOS application with cloud-native architecture using Firebase; implemented real-time data synchronization across distributed database serving concurrent users
- Owned full development lifecycle from design through deployment; built resilient authentication system and fault-tolerant leaderboard handling eventual consistency
- Implemented microservices-style backend with Firebase Cloud Functions; practiced CI/CD principles with automated testing and monitoring

Kambaz – Scalable Web Platform | *TypeScript, React, Node.js, MongoDB, AWS*   May 2025 – Jun 2025
- Architected distributed web application using microservices pattern; designed RESTful APIs handling authentication, authorization, and CRUD operations for concurrent users
- Built scalable MongoDB backend with optimized indexes; implemented caching strategies and query optimization for sub-200ms response times
- Practiced operational excellence through comprehensive logging, monitoring, and error handling; participated in code reviews following clean code principles

Real-Time ML System | *Python, C++, TensorFlow, OpenCV*   Oct 2023 – Mar 2024
- Engineered high-performance distributed inference system achieving 92% accuracy at 30+ FPS; optimized with C++ reducing memory footprint by 40%
- Published peer-reviewed research in International Journal of Computer Science; demonstrated ability to solve complex problems and communicate technical solutions

ACHIEVEMENTS

Problem Solving: HackerRank Gold Badges in Java, Python, C++, SQL, Problem Solving (Top 5% globally)
Published Research: "Hand Sign Recognition using ML" in International Journal of Computer Science
Specialization Interests: Distributed Systems, Machine Learning, Mobile Development, Data Engineering