

SINGH SAMIR

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[Live Portfolio](#) | [GitHub](#) | [LinkedIn](#)

CORE COMPETENCIES

- **AI & Data Engineering:** Vector Search, Retrieval-Augmented Generation (RAG), Large Language Models (LLMs)
- **Software Development:** Backend Architecture, RESTful APIs, Microservices, Object-Oriented Programming (OOP)
- **Cloud & DevOps:** Containerization (Docker), Cloud Computing (Azure), Event-Driven Systems (Kafka)
- **Database Management:** NoSQL (MongoDB), Relational (MySQL, SQL), Schema Optimization.

TECHNICAL SKILLS

- **Languages:** JavaScript (ES6+), Python, Java, C, C++, PHP, SQL
- **Modern Databases:** MongoDB (Atlas, Vector Search, RAG), MySQL
- **Frameworks:** Node.js, Express, React, Spring Boot, EJS, Bootstrap
- **Tools:** Microsoft Azure, Kafka (Confluent Cloud), Docker, Git, Postman

TECHNICAL PROJECTS

[Pro Trade AI – Live App](#)

- Architected an AI-driven financial analysis platform using **React** and **Machine Learning** models for market trend forecasting.
- Integrated **MongoDB Vector Search** to perform high-dimensional similarity searches on historical market data for pattern detection.
- Optimized data retrieval speeds by implementing efficient schema designs and indexing strategies.

[Echo – AI Voice Assistant](#)

- Engineered a conversational AI assistant utilizing **Python** and **OpenAI GPT-4** to process natural language queries with minimal latency.
- Integrated high-accuracy speech-to-text and text-to-speech APIs to facilitate hands-free user interaction.
- Developed a state-management backend to maintain context across multi-turn user conversations.

Personal Portfolio (Main)

- Designed and deployed a professional web-based portfolio to showcase technical projects and live application demos.
- Integrated automated navigation and interactive UI elements using modern web technologies to enhance user engagement.

Personal Portfolio (Legacy)

- Developed a secondary digital showcase focusing on historical project milestones and academic achievements.
- Optimized for cross-device responsiveness and streamlined content delivery for technical recruiters.

CERTIFICATIONS & ACHIEVEMENTS

MongoDB AI and Advanced Skills (2025)

- Building AI-Powered Search with MongoDB Vector Search.
- Building RAG Apps Using MongoDB.
- MongoDB Schema Design Optimization and CRUD Operations.
- From Relational Model (SQL) to MongoDB's Document Model.
- MongoDB Basics for Students.

Hacktoberfest 2025 Contributor

- Recognized by MLH for outstanding open-source contributions.
- Awarded for active participation in the Women In Tech Conference Hacktoberfest event.

Green Skills and Artificial Intelligence (2025): Completed a foundational course under the **Edunet Foundation and AICTE** "Skills 4 Future" program, focusing on the intersection of sustainable practices and AI implementation.

Course on Computer Concepts (CCC): Certified by [M/S. Velocis Educational Institute](#).

Technical Participation

- Technovation War 2024: Certificate of Participation from P.P. Savani University for Engineer's Day.
- Mastering the Cyber Battlefield: Workshop on Theory and Practical Insights by iFlutter Institute.

EDUCATION

P.P. Savani University, Surat

- **Diploma in Information Technology** | *Graduated 2026.*