

Milind Singh

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EDUCATION

Vellore Institute of Technology

Bachelor of Technology, Computer Science and Engineering (CGPA: 9.51)

Chennai, India

Sep. 2021 – July 2025

Delhi Public School

Intermediate- Class 12 (Score: 98.5%)

Bulandshahr, India

Mar. 2020 – July 2021

Delhi Public School

High School- Class 10 (Score: 97.66%)

Bulandshahr, India

Apr. 2018 – May. 2019

TECHNICAL SKILLS

Languages: Golang, Python, JavaScript, Java, C/C++, SQL, HTML/CSS

Frameworks: Go net/http, gRPC, Node.js, Express, Kafka, Scikit-learn, Web Sockets, Autogen Agents

Developer Tools: Git, Docker

Databases: PostgreSQL, MongoDB, Redis, MySQL

EXPERIENCE

Software Development Intern

June 2024 – July-2024

Fidelity International

Gurugram, India

- Developed an **AI Agents** system for autonomous task solving using **Autogen** and integrated **Tavily API** for access to web information.
- Engineered a system where the types of agents are dynamically selected based on the intent of the user's prompt, resulting in a **41% reduction in the number of LLM calls** compared to using a predefined set of agents.
- Designed and implemented a **custom agent maker** feature, allowing creation of user-defined agents.
- Implemented agents' **teachability**, with chat history stored in a **ChromaDB** instance, reducing stress on the context window.
- Integrated **Django APIs** to integrate above features into organization's in-house AI GPT platform.

Quant/Business Developer Intern

Sep. 2023 – Feb. 2024

FXDX.Exchange (MatQCode Capital)

Bengaluru, India

- Developed **Python**-based algorithmic trading bots and strategies, integrating a broker's API for real-time market execution, and managed trading data using an **SQLite database**.
- Configured a specialized triangular Arbitrage Bot for the Binance platform and Trading Dashboard UI, leveraging open-source bot frameworks with **Docker and Python**.
- Produced comprehensive investor pitch decks and delivered presentations to potential investors, articulating business model details and growth prospects.

PROJECTS

Student Management System | Golang, PostgreSQL, GORM, Docker, Postman

November 2024

- Designed and developed a RESTful API for managing student records, courses, and enrollments.
- Implemented 50+ API endpoints for CRUD operations and advanced querying, including role-based access
- Utilized GORM for efficient database interactions and PostgreSQL for reliable data storage.
- Dockerized the application for seamless deployment and environment consistency.

Microservices in Go | Golang, PostgreSQL, GORM, gRPC, Messaging Queues

Jan. 2025 – Present

- Successfully implemented cross-service communication using REST APIs, with a broker service as an entry point.
- Implemented 4 services so far: Authentication, Broker, Logging and Frontend
- Working on implementing a Kafka client for event driven architecture and gRPC for cross-service communication

LLM Fine Tuning for Chat Summarizing | Python, Transformers, Tensorflow, Django

Feb. 2024 – May 2024

- Fine-tuned a Hugging Face LLM(Flan-T5-XXL) on the SAMSum Corpus, utilizing LoRA to improve performance.
- Implemented quantization and pruning methods to reduce the model's memory footprint and inference latency
- Preprocessed dataset using tokenization and standardized sequence lengths, ensuring consistency for model training.
- Achieved ROUGE scores (ROUGE-1: 50.39%, ROUGE-2: 24.84%, ROUGE-L: 41.37%, ROUGE-Lsum: 41.39%), demonstrating improvement in summarization quality.