

Nikhil Sharma

nikhilsharma26500@outlook.com | [LinkedIn](#) | [Github](#) | [nikhilsharma.online](#)

PROFESSIONAL SUMMARY

A dedicated full-stack software engineer with strong communication and teamwork skills. Co-founded Guides, an AI Chatbot using Large Language Models, demonstrating innovation and problem-solving abilities. Leading multiple developers at Lassonde Blockchain Association, showcasing effective leadership and project management. Skilled in TypeScript, Python, NextJS, ExpressJS, FastAPI and MySQL, with a continuous learning mindset.

EDUCATION

Lassonde School of Engineering, York University
Bachelor of Science: Computer Science

Toronto, ON
Jan 2021 – Present

SKILLS

Programming Languages: Python, TypeScript, JavaScript, Java, HTML, CSS/SCSS

Libraries and Frameworks: ReactJS, ExpressJS, NextJS, FastAPI, Langchain, NestJS, Tailwind CSS

Databases: PostgreSQL, MySQL, SQLAlchemy, MongoDB, Prisma, FAISS, Chroma

Platforms: Azure Cloud, TiDB - PingCAP

EXPERIENCE

Plare AI ([Website](#))

Toronto, ON (Remote)

Software Engineer Intern

Nov 2023 – Dec 2023

Objective: Refactor Python Database Module to SQLAlchemy Project.

- Analyzed and **refactored** a production-grade **Python database module**, transitioned from **MySQL** Connector to **SQLAlchemy**, and optimized the code for performance and scalability.
- Conducted comprehensive tests and gathered performance metrics at scale.
- Delivered optimized source code and test functions, ensuring adherence to best practices for maintainability, and documentation. This included rigorous debugging, code reviews, and collaboration with the senior developer to guarantee the successful implementation of the module.

Guides (Full-Stack) ([Devpost](#) | [Github](#) – Archived Repo)

Feb 2023 – Present

Co-Founder

Objective: Developed personalized AI chatbot with a vision on helping students and professionals with studying and asking questions

- Utilized **OpenAI's API** to develop the chatbot, enabling it to receive user input and provide responses.
- Developed front-end components on **NextJS** with **Typescript**, implementing **Tailwind CSS** for styling.
- Implemented **Langchain** to chain prompts and utilized **Function Calling** feature of GPT.
- Used **FastAPI** to build a lightweight and fast server that runs the model, leveraging **SQLAlchemy** to develop database. Hosted on cloud using **TiDB**.
- Incorporated **FAISS** along with OpenAI Vector Embeddings for text file vectorization.

Lassonde Blockchain Association – York University ([Github](#))

Toronto, ON

Technical Lead / Software Developer

Feb 2023 – Present

- Leading a team of 10+ software developers for various software development projects covering both Web2 and Web3 technologies .
- Analyzed the Web3 market by conducting research on DeFi and NFT using raw blockchain data from Ethereum, Opensea, Uniswap, etc. by creating **PostgreSQL** queries and dashboard on Dune ([link](#)).
- Collaborating on **LBA – Blog** ([link](#)) and **LBA – Blog V2** ([link](#)) project at Lassonde Blockchain Association, utilizing **MySQL**, **Prisma** and **Express.js** for back-end and implementing, **TypeScript**, **NextJS** and **Tailwind CSS** for front-end development.

Neur JAM (Full-Stack) ([Github](#))

December 2023 – Present

Objective: Developing one-stop solution for programmers to try responses from different LLM (both closed and open source) models.

- Created a Minimum Viable Product (MVP) using **Python** and **FastAPI** and 4 Large Language Models (e.g.: Gemini - Google, GPT - OpenAI, Mistral 7B Instruct - Mistral AI and Llama-2 - Meta).
 - Orchestrating the deployment of open-source models, such as Llama-2 7b, on **Azure Cloud** leveraging their AI Studio.
 - Employing **NextJS** coupled with **TypeScript** to craft an engaging and user-friendly frontend. **Tailwind CSS** is being used for styling.
 - Constructing the database on **MySQL** using **SQLAlchemy** ORM in Python.
-

PROJECTS

Similarity API (Full-Stack) ([Github](#) | [Website](#))

NextJS, Typescript, Tailwind CSS, Prisma, PlanetScale, GoogleAuth

Objective: Developed a full-stack API service website using NextJS, while seamless integration between frontend and backend.

- Implemented rate-limited and protected API routes, along with a authentication system and an API key system for user key management.
 - Designed a visually appealing website with light/dark mode using **TypeScript**, **Tailwind CSS**, and optimized performance through **PlanetScale** database.
-

HACKATHONS

TiDB Future App Hackathon 2023

Jun 2023 – Aug 2023

- Created AI personalized AI chatbot with a vision on helping students and professionals with studying and asking questions.
- Ranked in the top 60 out of 1490+ participants. • Utilized TiDB's serverless database (MySQL) capabilities to create a full stack application.