resume.md 2024-10-12

Tanzim Mokammel

mtanzim@gmail.com | LinkedIn | +1 416-660-5498 | Toronto, ON | Website

Experienced senior software engineer with a proven track record in full stack development and a strong focus on problem solving and software design. Proficient in technologies such as Typescript, Go, Python, NodeJS, and React, with a background in leading and mentoring development teams. Recognized for contributions in optimizing systems and driving innovative solutions.

Interests include technology, music, travel, photography, fitness, video games.

Technologies

Typescript Go Python | NodeJS React NextJS | SQL NoSQL Kafka | Git Docker Kubernetes AWS

Key Skills

Problem solving, software design, mentorship, leadership and communication

Work Experience

Member of Technical Staff, Cohere | Toronto, Canada, Mar 2024 - Present

- Cohere empowers developers and enterprise with large language models (LLM)
- I am developing an application to enable enterprise customers to leverage retrieval augmented generation (RAG) on their data sources, including email, messaging, and distributed drives
- Key challenges include creating scalable backends for data ingestion, indexing, and retrieval, and integrating them seamlessly with a modern UI for chat, data management, and search functionalities
- I am also developing essential features for Cohere's self-serve platform, including billing, playground, and onboarding processes
- My primary focus is on the backend, utilizing Go, Python, Postgres, Redis, Kubernetes, GCP, and AWS
- For versatility and maintaining frontend competence, I am also developing full-stack features using NextJS and Typescript
- As a mentor, I provide guidance on best practices for system design, software design, testing, and documentation

Senior Software Engineer, Flipp | Toronto, Canada, Jan 2021 - Mar 2024

- Flipp helps North American shoppers save money by aggregating deals and flyers
- I am working on a greenfield web application enabling Flipp's retail partners design digital flyers, leading the charge in migrating off print flyers towards a digital solution
- Key challenges include establishing best practices for building a modern web UI with drag and drop
 interactions, alongside developing backend APIs and microservices. Frontend technologies include
 React, Typescript and Storybook, while Go, NodeJS, Ruby, Kafka, AWS, Github Actions and
 Kubernetes are critical on the backend.

resume.md 2024-10-12

 Mentoring peers on concepts such as functional reactive programming, atomic design, concurrency, and testing

- Continuously analyzing and improving existing systems: reduced endpoint latency by 35x through
 concurrent Go code optimization, simplified system architecture by consolidating scattered code
 across services and languages into a sub-500 LOC Typescript package
- On a similar spirit, I have led multiple award-winning hackathon and R&D initiatives. One project enabled automated flyer curation within a full stack NextJS app, integrating with OpenAl's GPT-3.5 large language model (LLM). A follow up project enabled semantic search of private product data using retrieval augmented generation (RAG): leveraging a locally hosted vector database (ChromaDB), and an open source LLM (mistral:7b)

Mentor, CareerFoundry | Remote, Feb 2022 - May 2023

• Mentored aspiring web developers in soft skills and industry processes, offering comprehensive guidance, feedback, and support in a MERN stack curriculum

Full Stack Engineer, Moonfare | Berlin, Germany, Jan 2020 - Jan 2021

- Moonfare makes investing in private equity easy, currently managing over €2.5 billion in assets
- I played a key role in developing new features and scaling the core web application to support business growth while refactoring to enhance performance and reduce technical debt; in one case endpoint latency was improved 89% through database and algorithm optimizations
- Mentored developers through code reviews and educational sessions

Full Stack Engineer, Diginex | Berlin, Germany, Dec 2018 - Dec 2019

 At Diginex, a blockchain technology company, I developed a cryptocurrency trading platform for algorithmic and manual trading, and worked on internal tools for backtesting arbitrage models, load testing, and supporting financial data transfer protocols. I utilized Python, Pandas, Postgres, and AWS in the backend, and React with RxJS on the frontend.

Contract Backend Engineer, ReloTalent | Hanoi, Vietnam, Mar 2018 - May 2018

• Developed a microservice to implement an iterative mathematical model for determining salaries during relocation considering tax rates, cost of living, and personal investments using Python, SQL, and AWS Lambda

Sr. Product Development Engineer, Advanced Micro Devices | Toronto, Canada, Jun 2012 - Nov 2017

 Led the development of system-level test programs and yield analysis with a global team for AMD Radeon products, receiving two Spotlight awards for contributing to over \$US 900,000 in company savings

Education

- Master of Engineering, Electrical Engineering | University of Toronto, Canada, June 2015
- Bachelor of Applied Science with Honors, Electrical Engineering | University of Toronto, Canada, June 2012