# **Tanzim Mokammel**

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 , NodeJS , React , and Go , with a background in leading and mentoring development teams. Recognized for contributions in optimizing systems and driving innovative solutions.

#### **Contact**

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# **Technologies**

Typescript Go NodeJS | React NextJS | SQL MongoDB Kafka | Git Docker Kubernetes AWS GitHub Actions

## **Key Skills**

Problem solving, software design, mentorship, leadership and communication

### **Work Experience**

#### Senior Software Engineer, Flipp | Toronto, Canada, Jan 2021 - Present

- 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.
- 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 OpenAI'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
- Developed new features for Moonfare's core web application and taking on the technical challenges to scale the business for a growing client base
- Challenges include designing database models, microservices, and user interfaces in addition to refactoring pre-existing software to improve performance and reduce tech debt
- In one case, I improved endpoint latency by 89% by optimizing asynchronous functions, database queries, and search algorithms
- Mentored fellow developers in algorithms, software design and database management through code reviews, documentation, and educational sessions
- Developed using a Typescript based tech stack with NodeJS, React, and MySQL

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

- Diginex pioneers blockchain based tools for governments and corporations, working with institutions such as the UN and Microsoft
- I helped develop a cryptocurrency trading platform that aggregates price data and allows algorithmic and manual trading across exchanges
- I worked on internal tools for backtesting arbitrage models using the Bellman-Ford algorithm, load testing, and supporting financial data transfer protocols
- Our tech stack and design principles focused on supporting data streams, analytics, and visualization:
   Python , Pandas , Postgres , and Redis on the backend, React with RxJS on the frontend, and AWS for encryption and user authentication

#### 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, <u>Advanced Micro Devices</u> | 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

#### **Interests**

Technology, music, travel, photography, fitness, video games