Ty Nasello

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SKILLS

Languages: TypeScript, Python, Rust, Golang, SQL, Java, C++.
Technologies: Docker, AWS, Kubernetes, PostgreSQL, NoSQL, React.js, Kafka, NestJS, GraphQL, Git.

WORK EXPERIENCE

Software Engineer Intern - MedMe Health - Toronto, ON. 5/23 - 8/23.

▪ Core member in unlocking a **new business revenue stream** for company through delivering **real-time data streaming** capabilities to customers by performing change data capture on up to 4000 events/minute (**Python**, **Docker**, **PostgreSQL**) and developing microservices to achieve seamless downstream transmission (**Typescript**, **AWS**).
▪ **Optimized resource utilization and scalability** of production databases and serverless infrastructure by designing and creating a system to proxy and pool database connections (**CDK**, **AWS**, **TypeScript**).
▪ Elevated the organization's ability to have **customers self-serve** integrations and data-driven operations by implementing the company's first **webhook API system** using **TypeScript** and **AWS** (Cognito, Lambda, API Gateway).
▪ **Increased QoL** of developers and shaped the standard for testing serverless components by constructing a testing utilities package.

Software Engineer Intern - Orbiseed Technology Inc - Toronto, ON. 9/22 - 10/22 (company ceased operations).

▪ Developed REST API endpoints and client-facing front-end features enabling insurance carriers to more effectively manage documents. Utilized **TypeScript, Express.js, React.js, MongoDB**, and **Jest**, employed agile practices, and leveraged technologies like Mongoose, S3, and SQS to carry out feature specifications.

Software Development Intern - MedMe Health - Toronto, ON. 1/22 - 4/22.

▪ Developed front-end pharmacist and patient-facing features for web applications empowering over **2200 Canadian pharmacies** to provide clinical services at scale. Implemented numerous shipped features and was an initial driver in unit testing new front-end components (**React.js, TypeScript, GraphQL, Redux**).
▪ Designed a time-saving tool that streamlined the process of mapping PDFs with persisted patient information, increasing team efficiency, and outsourcing work to non-developers.

EDUCATION

University of Waterloo, 2021-2026

Bachelor of Computer Science (BCS) - CGPA: 91.3 - Dean's Honors List Winter 2023.

PROJECTS

Event-Driven Microservices - 4/23 - GitHub Link

▪ Constructed a **microservice**-based ordering system, leveraging **Kafka** for **event-driven** communication between **Kubernetes**-managed services.
▪ Built a Rust-based CLI tool and implemented critical functionalities including secured APIs, and event emission and handling using technologies like **Go, Rust, Java, Python,** and **SQL.**

Clean Architecture Template - 12/22 - GitHub Link

▪ Developed a **highly modular** and **loosely coupled** monolithic application adhering to the **Clean Architecture** design philosophy, serving as a robust starting template for developers. Features include a secure API with JWT authentication, WebSockets, and comprehensive testing (**TypeScript, NestJS, PostgreSQL, Docker**).