

# 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 unlocking a **new business revenue stream** for the company through performing change data capture on up to 4000 events/minute and developing microservices to deliver **real-time data streaming** capabilities to customers using **Typescript, AWS, Python, PostgreSQL, and Docker**.
- **Optimized resource utilization and scalability** of production databases and serverless infrastructure by designing and creating a system to proxy and pool database connections using **CDK, AWS, and 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 helped shape serverless testing standards by constructing a testing utilities package.

**Software Engineer Intern - Orbiseed Technology Inc** - Toronto, ON. 9/22 - 10/22.

- 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**).