

Ty Nasello

tynasello.com | tnasello@uwaterloo.ca | in/ty-nasello | github.com/tynasello

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.

- Developed microservices to deliver **real-time data streaming** capabilities to customers using **Typescript** and **AWS**.
- Designed and constructed a system to proxy and pool database connections using **AWS** and the **CDK**, resulting in **optimized resource utilization and scalability** of production databases and serverless infrastructure.
- Core member in unlocking a **new revenue stream** for the company through performing change data capture on millions of records per day and normalizing, filtering, and sending events downstream for customer consumption. (**Python, PostgreSQL**)
- Implemented the company's first **webhook API system** using **TypeScript** and **AWS** (API Gateway, Lambda, Cognito), enabling customers to **self-serve** integrations and data-driven operations.
- **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.

- Engineered **REST API** endpoints enabling insurance carriers to store, manage, and download AI-processed documents and reports using **Typescript, Express.js, MongoDB, and S3**.
- Developed front-end dashboards using **React.js**, allowing users to upload and interact with a variety of document types.

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

- Developed pharmacist dashboards and patient-facing intakes using **React.js, GraphQL, and Redux**, for web applications empowering nearly **3000 Canadian pharmacies** to provide clinical services at scale.
- Initial **driver** in unit testing new React components (Jest), resulting in **increased test coverage** of frontend codebase.
- Designed a tool for patient PDF-mapping that outsourced work to non-developers and **increased team efficiency**.

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** warehousing system, leveraging **Kafka** for **event-driven** communication between **Kubernetes-managed** services.
- Created a CLI with Rust to oversee operations/events, and implemented critical functionalities of the system including secured APIs, and event emission and handling using technologies like **Golang, 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. Serves as a robust starting template for developers featuring a REST API, JWT authentication, WebSockets, and comprehensive testing (**TypeScript, NestJS, PostgreSQL, Docker**).