

# Maxime St-Onge Amoretti

## Backend Software Developer

✉ maxime.stongea@gmail.com    📍 Toronto, Canada    🌐 English, French, Spanish    🖱 maxamoretti.com


### PROFILE

I am a strong independent problem solver who loves contributing to vibrant teams. After spending three years working as an actuarial associate in the insurance industry, I decided to re-skill to become a software developer.

### RELEVANT EXPERIENCE

#### Co-Creator, Software Developer

Jan 2023 – present

Otter ([otter-framework.dev](https://otter-framework.dev)) 

Otter is a cloud native framework to easily integrate peer-to-peer video communication within web applications.

- Engineered an auto-scaling serverless infrastructure on AWS to enable WebRTC functionality into web applications (HTTP/WebSocket API Gateways, Lambda functions, ECS with Fargate, and DynamoDB).
- Wrote a CLI tool to automate the provisioning and teardown of AWS cloud infrastructure (AWS CLI).
- Developed a frontend application for private 1-on-1 meetings hosted by Otter (CloudFront with S3 Bucket). Features include low latency audio/video communication, instant messaging, and file sharing.
- Containerized and deployed CoTURN, an open-source implementation of STUN/TURN protocols, in an ECS cluster with Fargate to support Otter's P2P connectivity.
- Built a simple API for developers to integrate Otter's functionality within their web applications.
- Secured HTTP/WebSocket API Gateways by using an API key and JSON Web Tokens.
- Optimized Otter for low latency by reducing the number of reads to DynamoDB.
- Authored a technical case study on the design decisions and engineering challenges faced while building Otter.

#### Launch School

Apr 2022 – Dec 2022

Attended a mastery-based education program focused on software engineering fundamentals.

- ReAck: An application for collecting and inspecting HTTP webhook requests. ReAck is built with React, Node.js (Express framework), PostgreSQL, MongoDB, and Nginx.
- Rate Your Dinner: An application for rating culinary experiences. Built with Pug templating engine, Node.js and PostgreSQL.

### PROFESSIONAL EXPERIENCE

#### Actuarial Analyst - Pricing & Reserving

Jan 2019 – Apr 2022 | Toronto

Before changing profession, I worked at RSM Canada, Northbridge Financial Corporation, Wawanesa Insurance, and KPMG Canada as both a consultant and an internal actuarial analyst.

- Audited multiple insurance companies.
- Prepared the valuation for lines of businesses cumulating to more than \$1 billion.
- Collaborated closely with clients to achieve desired goals.
- Built data and financial models to support business requirements.

### SKILLS

#### Frontend

JavaScript, React, HTML, and CSS

#### Backend

Node.js, Go, Python, PostgreSQL, MongoDB, and RESTful APIs

#### AWS Cloud

Lambda, ECS, EC2, Fargate, API Gateway, CloudFront, S3, NLB, IAM, and DynamoDB

#### Other

TypeScript, WebRTC, Docker, Nginx, Git, WebSocket, and Webhooks

### EDUCATION

#### Software Engineering & Full-Stack Web Development

Launch School

2022

#### B.Sc. - Mathematics (Actuarial Specialization)

Université de Montréal

2018