# **Maxime St-Onge Amoretti**

# Backend Software Developer

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### **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 transitioned to a career as a software developer.

#### RELEVANT EXPERIENCE

# **Co-Creator, Software Developer**

Jan 2023 – present

Otter (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 within 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 React frontend application for private 1-on-1 meetings hosted by Otter (CloudFront with S3 Bucket), offering 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 

  ø on the design decisions and engineering challenges faced while building Otter.

# Software Developer, Self-Employed

Apr 2022 – Dec 2022

A few of the applications and technologies worked on during this time:

- 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. is 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

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

# **EDUCATION**

**B.Sc.** - Mathematics Université de Montréal 2018