# STEFAN MURGA

289-200-6335 Vancouver, Canada stefan@stefanmurga.com

#### **WORK EXPERIENCE**

## Amazon, Software Development Engineer

Jun 2019 - Present

- Refactored a web application that allows tax analysts to create snapshots and make changes to a
  dataset of product taxability by consolidating the two taxability representations within the application
  for different geographical regions into a unified form. Refactor included a large portion of code as
  product taxability is the core feature of the application, and each component had different logic for
  handling the two taxability representations. The result was an improved user experience for tax
  analysts, and the refactor was carried out without adverse impacts to clients and users.
- Built the first AWS-based service on the team, successfully ported over APIs, and migrated clients in production. The service is a cache layer on top of a DynamoDB table that vends data through APIs. Followed best practices to ensure security, maintainability, and operational excellence of the service, which has handled up to 1300 TPS and has a p90 latency SLA of <50ms. The service allows other teams to query for product tax code data and enables use cases such as the Seller Central webpage.</li>
- Designed and implemented the backend for a CRUD web application that allows tax analysts to author
  and manage various types of tax business rules. Communicated with tax analysts and the tax
  calculation engineering team to develop models for the business rules that reflect real world tax
  concepts and can be consumed in the tax calculation workflow. Had ownership and maintained the
  libraries that were used to consume the business rules for tax calculation.
- Designed and implemented a scalable shadow report generator that compares the resulting tax audit
  records of transactions from prod replayed against pre-prod environments. Tax analysts use the daily
  reports that include 1% of live prod traffic, up to 200GB in size, to reduce the risk of deploying tax
  compliance projects by acting as a regression suite filled with real world use cases.

eMurmur, Web Developer (part-time)	Sep 2018 – Apr 2019
Carleton University, Undergraduate ML Researcher	May 2018 - Aug 2018
Ciena, Software Developer Intern	May 2017 – Dec 2017
Stantec, Electrical Designer	May 2016 – Dec 2016
McAfee, Software Engineering Intern	May 2015 - Aug 2015
Canadian Armed Forces, Army Communications Technician	Mar 2010 - Mar 2014

### **EDUCATION**

Carleton University, B.Eng. Computer Systems

Sep 2014 - Apr 2019

- Graduated with High Distinction (3.9 GPA)
- 2016 Carleton University Undergraduate Co-op Student of the Year
- Awarded Senate medal for outstanding academic achievement upon graduation

#### **SKILLS**

<u>Java Python Typescript AWS CDK CloudFormation React APIs OOP Git CI/CD</u>
IntelliJ Visual Studio Code