Timothy Elgersma

4A, University of Waterloo, Computer Science

trelgersma@uwaterloo.ca
linkedin.com/in/timothy-e
github.com/timothy-e
416-728-4683

Summary of Qualifications

- **Languages**: C++, Java, Javascript, Kotlin, LaTeX, Python, SQL, Typescript
- Commended by managers for being a hardworking, dependable, and flexible team member
- Strong focus on testable code - every module I checked in had over 95% test coverage
- Excellent communication skills demonstrated through documentation, peer mentorship, and team meetings

Experience

SEPTEMBER 2020 – DECEMBER 2020
Compiler Engineer • Huawei
- Dramatically reduced time-to-debug by automating the process of identifying the failing shader and optimization pass
- Constructed a framework to compare compiler performance to build out a comprehensive GPU analysis suite

JANUARY 2020 – APRIL 2020
Backend Developer • Faire
- Increased Faire's contribution margin by 180bps by implementing payment assistance plans and allowing the risk team to make timely, informed decisions by surfacing relevant customer and Plaid data
- Decreased customer support ticket count by 9% through heuristics to auto-handle common requests
- Reduced Faire's tax liability by 30% by collecting retailer tax information

MAY 2019 – AUGUST 2019
Software Developer • Genesys
- Designed and documented Genesys Conversation Provider's database access module
- Improved solution resiliency by implementing a persistent queue for asynchronous backend communication in Typescript
- Increased testability by upgrading Jenkins pipeline to include Postgres for simple integration tests

SEPTEMBER 2018 – DECEMBER 2018
Software Developer • Encircle
- Designed and implemented Encircle's Moisture Mitigation report generator using Python and SQLAlchemy
- Reduced bugs, increased coherency, and reflected new model changes by rewriting and refactoring Coffeescript and Typescript mobile core

Projects

JUNE 2020 – PRESENT
Developer • Crop Companion
- Crop Companion is an Android app that generates a planting schedule for a balanced diet for a varying population
- Implemented and tested the calculations, and designed and some input screens
- Created for CS 446 (Software Architecture), and under development to be adapted for Thrive For Good

JANUARY 2019
Backend Developer • Split
- Split is an Alexa based cost sharing apps designed to make living with roommates easier
- Built a RESTful API with Flask hosted in a Digital Ocean droplet to handle requests made from AWS Lambda

Education

SEPTEMBER 2017 – APRIL 2022
University of Waterloo • Bachelor of Computer Science
- Going into 4A of a Bachelor of Computer Science
- **Relevant coursework**: CS 341 (Algorithms II), CS 446 (Software Architecture), CS 458 (Security)