# OMAR AKKILA

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#### **EDUCATION**

# McGill University, Montreal, QC

• Bachelor of Software Engineering

Sept 2011 – May 2017

# **TECHNICAL SKILLS**

# PROGRAMMING LANGUAGES

Java (Advanced)
Python (Advanced)
C (High-Intermediate)
Javascript (Basic)
Rust (Basic)

#### FRAMEWORKS & TOOLS

Git (High-Intermediate) Linux (High-Intermediate) jQuery (Basic) Bootstrap (Basic) SQL (Basic)

#### **PROJECTS**

#### SOCCER-PLAYING AUTONOMOUS ROBOT – FIRST PLACE IN DESIGN COMPETITION

- Lead software designer; functional capabilities include localization, navigation, obstacle avoidance, odometry, ball-loading mechanism, and launching mechanism
- Constructed with the Lego Mindstorms EV3 Controller with Lego-based sensors and pieces
- Multithreaded Java program utilizing the LeJOS EV3 API

#### MINILANG COMPILER

- Compiler for a small, simple language that targets C developed using lex and yacc
- Currently in the process of replacing backend with LLVM backend

#### GOLITE COMPILER

• Compiler for a subset of the Go programming language that targets C++

#### TV RECOMMENDER

• Web application for recommending TV shows built with Flask during a 48-hour hackathon

#### **OPEN SOURCE CONTRIBUTIONS**

## **SERVO/SERVO – 9944 STARS | 1712 FORKS**

- Browser engine focusing on performance, parallelism, security, and modularity sponsored by Mozilla
- Three merged pull requests that refactor methods in different parts of the codebase to be more idiomatic and performant

## RUST-LANG-NURSERY/RUST-BINDGEN – 409 STARS | 218 FORKS

- Library for automatically generating Rust Foreign Function Interface (FFI) bindings to C/C++ libraries
- One merged pull request cleaning up a file

# MOZILLA/TREEHERDER-94 STARS | 155 FORKS

- A web interface for the management of continuous integration build and test results for Mozilla projects
- Two merged pull requests that refactor tests

# SERVO/CORE-TEXT-RS – 14 STARS | 23 FORKS

- Rust bindings for the macOS Core Text API used in the aforementioned Servo project
- One merged pull request that fixes many warnings generated when building

#### WORK EXPERIENCE

## COMPUTER SCIENCE UNDERGRADUATE SOCIETY (CSUS) HELP DESK TUTOR

Sept 2016 – April 2017

- Recipient of Tomlinson Engagement Award for Mentoring (TEAM) in recognition of services
- Assist students with coursework and deliver mock interviews for upper-year students