Yaron Koller

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Summary of Qualifications

- More than five years of software development experience including school, personal, and professional work
- Strong communication and teamwork skills acquired through group projects and past internships
- Passionate about problem solving, learning new things, and taking on difficult challenges
- Languages: C++, C, C#, Python, Racket, Bash

Experience

Software Engineering, Arista Networks   Sept. 2017 – Dec. 2017
- Worked on Smash, an internal library used for inter-process communication through shared memory
- Built a new feature that allows for performance improvements of up to 22% for some Smash clients
- Solved a complex issue in a critical part of Smash's lock-free algorithm for handling notifications

Software Design Engineering, Evertz Microsystems   Jan. 2017 – Apr. 2017
- Developed tools for the configuration, monitoring, and debugging of Evertz's flagship enterprise video router
- Implemented several security features such as user permissions, inactivity timeouts, and limited login attempts
- Improved the performance of a C++ application by over 50% by introducing multithreading and synchronization

Software Engineering, IGNIS Innovation   May 2016 – Aug. 2016
- Developed code that parses and interprets special arithmetic expressions to create OpenGL shader files
- Built a software library that communicates with and provides an interface to an industrial oven
- Worked on a wide variety of internal tools and features as part of an Agile software team

Full Stack Web Developer, Imagine Communications   Sept. 2015 – Dec. 2015
- Implemented new features for a large web application using C#, Typescript, and AngularJS

Projects

WLP4 Compiler, translates a subset of C into MIPS machine language   Jan. 2016 – Apr. 2016
- Built the compiler from the ground up for CS 241 and received a perfect score on correctness
- Scored in the top 4% of the class for compiler optimization through careful planning and consideration
- Implemented several compiler optimization techniques including constant folding and constant propagation

Blind, a 2D role-playing game   Jan. 2015
- Created the game in C# using the Unity game engine as part of a team of three
- Developed player navigation and non-player character behaviour with grid-based movement

Education

Candidate for Bachelor of Computer Science, University of Waterloo   Sept. 2014 – Apr. 2019
Awards:
- Term Dean's Honours List – Fall 2016
- Term Dean's Honours List – Winter 2015