Yaron Koller

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Summary of Qualifications

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

Experience

Software Design Engineering, Evertz Microsystems Ltd.   Jan. 2017 – Apr. 2017

- Developed tools for the configuration, monitoring, and debugging of Evertz's flagship enterprise video router
- Improved performance of a C/C++ application by over 80% by introducing multithreading and synchronization
- Implemented several security features such as user permissions, inactivity timeouts, and limited login attempts

Software Engineering, IGNIS Innovation Inc.   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 Corp.   Sept. 2015 – Dec. 2015

- Implemented new features for a large web application using C#, Typescript, and AngularJS
- Completely restructured the front-end of the web application and achieved greatly improved performance

Projects

Yoyo, a statically typed scripting language   Mar. 2017 – present

- Constructed plans for this long-term project, including many ideas for the syntax and semantics of the language
- Designed and applied a finite-state machine for the lexical analysis stage of the interpreter using C++

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 – present

Awards:

- Term Dean's Honours List (Winter 2015, Fall 2016)
- President's Scholarship