Joshua Koza

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Skills

Languages C++, C#, Lua, HTML, Java, CSS, Unity3D
Software Arduino, Visual Studio, Git, Eclipse, Bootstrap

PROFICIENT | FAMILIAR

Projects

Flash (Releasing to App Store and Google Play) *Jan 2016-Present*
- Developed a puzzle game using the Corona SDK and Lua.
- Features random level creation and a physics engine to handle laser reflection.
- Worked with a team using Git for version control.

Vanish *May 2015-Jun 2015*
- Developed a top-down 2D stealth game made using C#.
- Fully modular design and effective use of object oriented programming principles.
- Featured fully functional AI, a level development module, and an effective polygon hit detection engine.

Delve *May 2015-Jun 2015*
- 2D mining game modelled after MotherLoad and Terraria.
- Developed in C# using WPF for graphics optimization.
- Featured a functional physics engine and an algorithm for random world generation.

Drone *Nov 2015-Dec 2015*
- Built a drone from scratch using a CC3D flight controller.
- Used Open Pilot CC3D software to configure and manage the flight controller.

Arduino Phone *Nov 2015-Dec 2015*
- Built a phone with calling and SMS abilities, using an arduino UNO with a sim 900 GSM/GPRS Shield.
- Designed an easy to use UI for the user to interact with through the use of a matrix keypad.

Joshkoza.com *Dec 2015-Jan 2015*
- Designed a website to showcase my projects and resume.
- Developed using CSS, HTML, and Bootstrap.

Extra-Curriculars

UW Robot Racing *Sep 2015-Present*
- Member of the Computer vision team.
- Worked in a team to develop an algorithm to detect changes in traffic lights using OpenCL and C++.

Deloitte Tech Exchange *Oct 2015-Nov 2015*
- Worked with a team to develop a system to read EMS (Electrical Muscle Stimulation) to detect abnormalities and provide an indication of certain illnesses, through the use of the MYO armband.
- Reduced the cost of EMS tests by $1000's, providing relatively the same level of accuracy as modern sensors.

Waterloo Hybrid *Sept 2015-Present*
- Member of the electrical and firmware team.
- Worked in a team to develop some of the critical embedded systems of the car.
- Attended the weekly held help sessions to learn about embedded systems.

Work Experience

McDonald's *Guelph, ON*
Aug 2014-Aug 2015
- Effectively communicated and collaborated with groups of 4-8 people to both maintain the quality of food and reduce wait times.
- Demonstrated a proficient understanding of safe food preparation and handling procedures.

Education

University of Waterloo *Waterloo, ON*
Candidate for Bachelor of Applied Science in Computer Engineering *Sep 2015-2020*
- Computer Programming, Embedded Systems, Calculus II, Linear Circuits, Digital Circuits, Discrete Math.

Honors & Awards

2011	**Pascal Mathematics Competition**	Scored top 10 percentile in a national competition.	*University of Waterloo*
2015	**Entrance Scholarship**	Awarded for exceptional grades and extra-curriculars.	*University of Waterloo*
2014	**McMaster Engineering Olympics**	Earned an entrance scholarship for my performance.	*McMaster University*