

## SKILLS SUMMARY

### Programming

- Java/Groovy, C++, Python, HTML/CSS, Bash, JSON, XML, Powershell, Arduino, Javascript (React)
- IDEs: Eclipse, Netbeans, DevC++, PyCharm
- Operating systems: Windows, Linux/UNIX
- Technologies: Git, TortoiseHg, VMWare, Virtualbox

### Manufacture and Design Technologies

- Blender, Cinema4D, AutoCAD, and SolidWorks
- Experienced with Adobe Photoshop and PaintTool Sai
- Experienced with soldering and 3D Print Prototyping

### Personal

- Strong problem solving and communication skills
- Trilingual English, French (DELFI B2), and Mandarin

## RELEVANT EXPERIENCES

### Imagine Communications Corp. – QA Analyst

January 2017 – April 2017 | Toronto, Ontario

- Created custom Python tools with Google Sheet API to streamline QA reporting and asset tracking for Epic-MV team
- Scripted in Groovy and managed over 70 Zenium blueprints used for continuous regression testing
- Created bash scripts to modify over 900 Zenium blueprints for migration and compatibility with Linux
- Performed database migration smoke tests, application level functionality test, and backend stress/performance tests

### Ciena Inc. – IT Council Technician

August 2015 – September 2015 | Ottawa, Ontario

- Managed appointments using Outlook with over 120 Ciena employees to improve laptop performance through software diagnostic, updates, and hardware cleanups
- Built and imaged 66 new Linux workstations with RedHat to be distributed to Ciena employees
- Provided RAM, HDD, and cooling hardware upgrades as well as desktop maintenance tutorials to employees

### Inkless – Company Lead

September 2015 – June 2016 | Ottawa, Ontario

- Led my own entrepreneurship with 34 students and 6 VPs to a 362% return on investment, selling over 150 shirts
- Negotiated sale opportunities at 3 different malls, and landed a bulk sale with JA Ottawa
- Adapted to learn financial management skills, helped VP Finance create and organize fiscal spreadsheets

## PROJECTS

### Knock Password Door Lock – Personal Project

January 2017 – May 2017 | Waterloo, Ontario

- Sound activated password storage and verification based on Arduino to unlock dorm room; programmable in real time
- Double volume sensor for sound source locating; single servo deadbolt actuation

### Robot Plotter with Tic Tac Toe AI – MTE100 Final Project

October 2016 – December 2016 | Waterloo, Ontario

- Designed, machined, and constructed a 2 axis CNC robot capable of writing on and reading from a whiteboard
- Created an AI in C++ capable of reading player moves, computing optimal moves, and executing a counter move
- Built the CNC platform around modular abstraction, allowing for easy implementation of other features

### Java Arena Game – BlackMagicks

February 2015 – June 2015 | Ottawa, Ontario

- Built an object oriented third person arena game in Java with combination mechanics for attacks and moves
- Developed a hitbox sensing algorithm, basic enemy AI and pathfinding, and integrated handmade sprites

## EDUCATION

### University of Waterloo – Candidate for Bachelor of Engineering

September 2016 – Present | Waterloo, Ontario

- Teams: WATonomous autonomous car, Waterloo MarsRover
- Relevant Courses: Algorithms and Data Structures, Digital Computation (C++/RobotC), Engineering Graphical Design
- Extra Courses: Stanford Machine Learning Online