

Summary

I am a **Software Engineer('18)** from the **University of Waterloo!** I currently work at **Microsoft**, Vancouver - BigPark Studios. I have had internships on **Graphics, Computer Vision, and Mixed Reality** projects at Microsoft and was also engineering **Android** apps at multiple startups and various other fields in tech: **Game Development, Web Development, and Human Computer Interaction Research**. Throughout all of my internships I have **led** and/or **collaborated** in iterative **design** and **prototyping** phases.

Projects

LettuceMeet Software Engineering Capstone Project

<https://lettucemeet.com>

Making it easy to schedule **group meetings and events**. Web-App Built with **NodeJS, React, Javascript, SASS, Docker, NGINX, PostgreSQL**, with a 5-man team, where my major focus was on **frontend** work.

Pholume Software Architecture (SE 464) Project

<https://github.com/ShreyK/Pholume-Android>

Built the entire **Android** App.
A new **Social Network** for artists to create and share an **immersive photographic** experience by capturing a **photo** accompanied with a short **audio** recording to save an experience like never before.

Orbit G.I. Jam (Game Hackathon) | University of Waterloo

<https://github.com/dvdfu/orbit>

Local **Multiplayer** Space based **Game** made in **Lua** in **48 hours**.
Awarded the **Best Overall Game** prize!

Financial Market Predictor Computational Intelligence (ECE 457B) Neural Network Project

Built 2 networks - **Feedforward** and **LSTM (RNN) Networks** to predict cypto currency financial markets using **Python**

Education & Awards

University of Waterloo Waterloo, CA

2013 - 2018 Software Engineering w/ Honors & Co-Op
2013 Presidents Entrance Scholarship and Engineering International Student Scholarship

International School of Arts & Sciences Dubai, U.A.E.

2013 High School Diploma
Graduated Top of the class (12th grade)

Indian Hill High School Cincinnati, Ohio, U.S.A

2010 - 2012 High School (10th, 11th grade)
2012 Mock Trials Regional - Outstanding Attorney Award

Experience

Microsoft Software Engineer | Vancouver

July 2018 - present

BigPark Studio

Microsoft Software Engineering Intern | Vancouver, CA

Sept - Dec 2017

Mixed Reality Viewer | BigPark Studio

- Joined the team post-launch to be a part of the Creative design process to **research, analyze, prototype** and **experiment** on new features for the **3DFE ecosystem**.
- Brought forward ideas to help reduce the app size from **100MB** to **27 MB** and automated a size graph export on each build for analysis.
- Setup the **A/B experimentation infrastructure** for the app and maintained it with refactors and bug fixes.

Microsoft Software Engineering Intern | Vancouver, CA

Jan - May 2017

Project Durban - Core | BigPark Studio

- Built a **3D Asset Importer DLL** to allow transcoding and transmission of 3D mesh data through the projects **C++, CX & C# interop** layers and finally render in our Engine for a HoloLens project.

Canvas 3D - Transcoders & Native Engine | BigPark Studio

- Transitioned to a foreign project and codebase to help with **Bug Fixes** and **Code Refactoring**.
- Performed **Data Analysis** on **10,000+ 3D models** from Remix3D using multi-threaded **Powershell** scripts calling internal **C++** tools.

theScore Inc. Android Engineering Intern | Toronto, CA

May - Aug 2016

eSports Android App

Refactored major parts of the app to make it more **lightweight, effecient** and **userfriendly**, working closely with Design and QA to ensure any new features and updates were foolproof.
Added a **Spoiler Mode**, **Dynamic Coachmarks**, **Localization** support into the app.

KnowRoaming Android Engineering Intern | Toronto, CA

Sept - Dec 2015

KnowRoaming Android App

Helped **redesign** and **rebuild** the entire Android App.
Added backend support in **Java** for **SMS Verification** and **Account Management**.

Uken Games QA Analyst Intern | Toronto, CA

Jan - May 2015

Project Silver

Helped iterate on early game design from **brainstorming** to **core feature generation** to a full **prototype**.
Pair programming to develop the prototype using **JavaScript ES6** (Frontend) and **Ruby on Rails** (Backend).

QA

Testing 7 HTML5 based games on Android, iOS, Blackberry, Amazon and Windows devices on a daily basis.

University of Waterloo Research Development Assistant | Waterloo

May - Aug 2014

Human Computer Interaction

Built an application to help in the of testing a **PhD thesis** in "**Large Scale displays in Public Areas**" using a Kinect device with **Processing** (w/ **OpenGL** interops) to sense and react to 3D environment data.

Project Ormis

Helped setup and run experiments for a multi-device military simulation software

Games Institute Jam | Gaming Hackathon

Taught **Programming 101** for 2 recurrent terms, where I built a **FlappyBird** clone in **Processing** live on stage.