

## Summary

I am **4th Year Software Engineering** student at the **University of Waterloo**! At **Microsoft**, I worked on **Graphics**, **Computer Vision**, and **Mixed Reality** projects. Previously, I was developing **Android** apps at multiple startups and have experience in various other fields in tech: **Game Development**, **Web Development**, and **Human Computer Interaction research** to name a few. I enjoy affecting every part of the product development process and have experience in **leading** and **collaborating** in iterative design and prototyping throughout all of my internships.


## Projects

 **Akoko**  
Software Engineering Capstone Project  
<https://akoko.co>

Making it easier to create and schedule **events**.  
Web-App Built with **NodeJS**, **React**, **Javascript**, **CSS**, **Docker**, and other latest technologies 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!

## Education & Awards

 **University of Waterloo**  
Waterloo, CA

**2013 - 2018** Software Engineering w/ Co-Op  
**2013** Presidents Entrance Scholarship  
**2013** 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 Engineering Intern | BigPark Studio, Vancouver

Sept - Dec 2017

### Mixed Reality Viewer

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 | BigPark Studio, Vancouver

Jan - Dec 2017

### Project Durban - Core

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

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, efficient 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.