

# Shrey Khosla

 [theshreyk.com](http://theshreyk.com)

## Summary

Software Engineer ('18) from the University of Waterloo! Currently at Microsoft working on the Windows Photos team.

Previous internship experience includes:

- Graphics, Computer Vision, and Mixed Reality
- Android Engineering at multiple startups.
- Game Dev, Web Dev, HCI R&D.

Throughout my experience I have led and/or collaborated in iterative design, refactoring and prototyping phases.

## Projects

### LettuceMeet U.W. Software Engineering Capstone Project

<https://lettucemeet.com> (1k+ MAD)

Mar 2018 - present

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

### Financial Market Predictor Computation Intelligence (ECE 457B) - Final Project

<https://github.com/ShreyK/ECE457B>

Apr 2018

- Built 2 neural network models: Feedforward and LSTM (RNN) to predict crypto currency markets using Python and both Keras & Tensorflow

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

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

Nov 2016

- Local Multiplayer, Space based 2D Game made in Lua in 48 hours (team of 3).
- Awarded Best Overall Game prize!

### Pholume Software Architecture (SE 464) Project

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

Nov 2016

- Full-stack Android (my focus), iOS, and Web solution created to be a new Social Network for artists to create and share immersive photographic experiences by capturing a photo accompanied with a short audio recording to save and share to their feed.

## Education & Awards

### University of Waterloo Waterloo, CA

#### Software Engineering w/ Honors & Co-Op

2013 - 2018

- President's Entrance Scholarship 2013
- Engineering International Student Scholarship 2013

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

#### High School Diploma

2013

- Graduated Top of the class (12th grade)

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

#### High School (10th, 11th grade)

2010 - 2012

- Mock Trials - Outstanding Attorney Award Regionals 2012

## Experience

### Microsoft BigPark Studio, Vancouver

#### Software Engineer | Full-Time

July 2018 - present

#### Software Engineering Intern

Sept - Dec 2017

##### > Mixed Reality Viewer (now 3D Viewer)

- Joined team post-launch into a Creative design process to research, analyze, prototype and experiment on new features for the 3DFE ecosystem.
- Brought forward ideas to help reduce the release app size from 100MB to 27 MB and automated a size graph export on each build for analysis.
- Built a prototype A/B experimentation infrastructure for the team using new internal Microsoft tools.

##### > Canvas 3D (now Base 3D)

Feb - Apr 2017

- Transitioned to a foreign project mid internship to help with Bug Fixes and Code Refactoring in the Transcoders & Native Engine Team. (currently being used as the base 3D native engine across Microsoft.)
- Performed Data Analysis on 10,000+ 3D models from Remix3D using multi-threaded Powershell scripts interop-ing with custom built internal C++ tools to extract binary data.

##### > 3D Asset Importer

Jan - Feb 2017

- 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 Windows tented project.

### 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, CA

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.