

Shrey Khosla



shreykhosla.com

Summary

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

Previous 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)

- 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.

Mar 2018 - present

Financial Market Predictor

Computation Intelligence (ECE 457B) - Final Project

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

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

Apr 2018

Orbit

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

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

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

Nov 2016

Pholume

Software Architecture (SE 464) Project

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

- 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.

Nov 2016

Education & Awards

University of Waterloo

Waterloo, CA

Software Engineering w/ Honors & Co-Op

2013 - 2018

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

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, CA

July 2018 - present

Software Engineer | Full-Time

- Working on the **Windows Photos** app. Improving the code-base and the user experience.

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.

Feb - Apr 2017

> Canvas 3D (now Base 3D)

- 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.

Jan - Feb 2017

> 3D Asset Importer

- 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.

May - Aug 2016

theScore Inc.

Android Engineering Intern | Toronto, CA

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.

Sept - Dec 2015

KnowRoaming

Android Engineering Intern | Toronto, CA

KnowRoaming Android App

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

Jan - May 2015

Uken Games

QA Analyst Intern | Toronto, CA

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.

May - Aug 2014

University of Waterloo

Research Development Assistant | Waterloo, CA

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.