SKILLS

**SOFTWARE**

Unity

Autodesk Maya

Adobe CC (PS, PP, AE)

**PROGRAMMING**

C#

C++

Python

HTML/CSS

JavaScript

MEL

Standard ML

Googling Stackoverflow

HONORS

**GOOGLE WORKSHOP**  Fall 2016

Invited to develop AR apps for the Tango at Google New York

**WEIRD REALITY**  Fall 2016

Presented SocialVR at Weird Reality Art & Code Conference

**MS IN COMPUTER SCIENCE**

**Georgia Institute of Technology**

Spring 2017 – Spring 2020

**BFA IN ELECTRONIC TIME-BASED ART**

**Carnegie Mellon University**

Fall 2012 – Spring 2016

**INTERNATIONAL BACCALAUREATE**

Fall 2011 – Spring 2012

EDUCATION

**SOFTWARE ENGINEER – DEEPMOTION INC.**

2017 - Present

Pipeline and gameplay engineering for physics-based, AI-driven characters. Developed UI and pipeline for rig editor, used by Samsung for AREmoji native app on their flagship S10 device. Wrote frontend JavaScript and API for online browser demo of intelligent bipedal character.

**VR RESEARCH ASSISTANT – ROBOTICS INSTITUTE**

2016 - 2017

Research work with Prof. Stelian Coros on VR. Integrated intelligent bipedal character and gestural interaction through Leap. Collaboration with DeepMotion.

EXPERIENCE

**VR THREE POINT TRACKING DEMO** 2019

Designed and implemented VR demos in Unity and Unreal that demonstrates full-body avatar simulation. The player directly controls a virtual avatar using the motion controllers and head-mounted display as tracking points to interact with a fully realized physics-based environment.

**NEURON BROWSER DEMO** 2018

Frontend JavaScript for interactive demo showcasing digital bipedal character trained with machine learning. Also wrote the API layer that allows communication between JavaScript code and binary library that comprise the custom physics engine and AI.

**AVATAR RIG EDITOR** 2017

UI, pipeline engineering, and character retargeting. Allows the user to quickly prepare rigs for integration with DeepMotion’s AI-driven character. Allows animation data for one skeleton to be retargeted onto a different bone hierarchy. Used by Samsung for AREmoji app on their flagship S10 device.

**UNITY SPHINX** Summer 2016 Personal Project. Cross-platform DLL wrapper for speech recognition library CMUSphinx in Unity. Written in C++ and C#.

**STATUEVISION** Summer 2015 Coordinated with artist Claire Hentschker to create interactive installation in Unity with Leap Motion. Presented at AMC Creativity and Cognition, Glasgow.

PROJECTS

Software Engineer

RALPH KIM

Portfolio: http://www.ralphkim.com

E-mail: ralph.kim93@gmail.com

Phone: 678-372-3227