# Trung Le

1-724-372-3957 trungtuanle90@gmail.com <u>trungtuanle.com</u> <u>github.com/trungtle/</u>

## Education

University of Pennsylvania, PA – MSE Computer Graphics, May 2017, GPA: 3.8/4.0 University of Washington, WA – BS Electrical Engineering, June 2012, GPA: 3.51/4.0

### Skills

Graphics: WebGL, OpenGL, rendering

Programming: C/C++, Python, C#, Javascript, Objective-C

Software: git, QT, Visual Studio, JIRA, Unity, Unreal, Maya, Houdini, iOS

# Experience

#### **WEBGL PROGRAMER, INDEPENDENT – 2016-PRESENT**

Contributed significantly to developing the first WebGL2 Samples Pack (view at <a href="https://github.com/WebGLSamples/">https://github.com/WebGLSamples/</a> WebGL2Samples/). Invited speaker at Khronos event in GDC 2016 on WebGL2.

#### **UNITY PROGRAMER, XLAB, UNIVERSITY OF PENNSYLVANIA – 2016-PRESENT**

Designed gameplay and programmed game logic for xBlocks, an interactive embedded toy that enable players to navigate a digital world with physical block components.

#### TEACHING ASSISTANT, COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF PENNSYLVANIA - 2016-PRESENT

Assisted with Intro to Interactive Graphics. Helped students understand concepts such as camera, transformations, skinning, OpenGL, shaders, and other introductory graphics concepts. This course contains significant C++ programming.

#### FIRMWARE ENGINEER, JAWBONE, SEATTLE WA - 2012-2014

Developed infrastructure and applications for the UP3 fitness wristband on ARM Cortex and iOS platforms. This includes the BTLE protocol, authentication and encryption between device and mobile app, activity classification collection tools, peripheral drivers, USB interface, and UX.

#### RESEARCH ASSISTANT, UW SENSOR LAB+INTEL LAB, SEATTLE WA - 2010-2012

Designed a GUI with Python QT for the systems used in Wireless Resonant Energy Link (WREL) research. The software supports data collection, data visualization, wireless control, and power diagnostics. Over the years, this software has been forked and extended for use in other research and at startup company Wibotic.

#### TEACHING ASSISTANT, COMPUTER SCIENCE DEPARTMENT, UNIVERSITY OF WASHINGTON - 2012

Assisted with Intro to Hardware. Held lab sections, prepared class materials and assignments, administrated the course website, completed grading, and ran office hours. The course materials taught Verilog to build Y86-CPUs on FPGAs.

# **Projects**

(please see more at www.trungtuanle.com for a complete portfolio)

#### **CARROLL, A VR EXPLORATORY GAME IN UNITY - 2016**

Lead programmer. Winner of PennApps XIII for Best Design.

#### PATH TRACER WITH MIS, PHOTON MAPPING, RENDERER - 2015

Programmed in C++. Produced a quality renderer with multiple importance sampling, support for different BRDF materials, and optional photon mapping.

#### **VIETSPEAK**, LANGUAGE LEARNING GAME APP – 2015-PRESENT

Creator. Developed a web app in Javascript, Meteor for learning Vietnamese in a simple and intuitive way.

#### SHIRES, COMPETITIVE STRATEGY BOARD GAME IN UNITY - 2014

Creator. Developed in C#. The game is inspired by chess and other turned-based games in the genre. Open source.

### Invited talks

**WebGL2 Samples Pack** Khronos event, GDC 2016 *Trung Le and Shuai Shao*  WebGL2 Samples Pack
NYC WebGL Meetup 2016
Trung Le and Shuai Shao