Trung Le

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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: CUDA, Vulkan, WebGL, OpenGL, rendering
Programming: C/C++, Python, C#, Javascript, Objective-C
Software: git, QT, Visual Studio, JIRA, Unity, Unreal, Maya, Houdini, iOS

Experience

TOOLS PROGRAMMER, EPIC GAMES - JUNE 2016 - SEPTEMBER 2016

Implemented features for the immersive Virtual Reality mode in Unreal Engine 4, including terrain editing, virtual keyboards, and foliage painting in VR. In this mode, users can edit game levels while in VR, such as Oculus and HTC Vive.

WEBGL PROGRAMER, INDEPENDENT – 2016-PRESENT

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

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)

PROJECT EM, AN VOICE-CONTROL 3D PLATFORM GAME IN UNREAL WITH ALEXA – 2016

Lead Unreal programmer. Second place of PennApps XIV. Winner of the use for Alexa. Winner of best AR/VR application.

CARROLL, AN ALICE-IN-WONDERLAND-ESQUE VR EXPLORATORY GAME IN UNITY – 2016

Lead Unity programmer. Implemented gameplay and physics. Winner of PennApps XIII for Best Design.

CUDA RASTERIZER WITH K-BUFFER AND GLTF, COURSE PROJECT – 2016

Programmed in C++ and CUDA. Parallelize rasterization per primitive triangle with k-buffer support for transparency.

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.

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