

Paul Kilgo

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Academics

Clemson University

Ph.D. in Computer Science

Dissertation: "Radiative Transfer Using Path Integrals for Multiple Scattering in Participating Media"

Advisor: Jerry Tessendorf, Ph.D.

Clemson, SC

2012–December 2016

The University of Alabama

M.S. in Computer Science

Tuscaloosa, AL

2012

The University of Alabama

B.S. in Computer Science and Mathematics

Tuscaloosa, AL

2011

Skills

Programming Languages: Python, C++, C, Shell, Java

Platforms: GNU/Linux, Windows, OSX, Android

Software and Frameworks: Git, Maya, Nuke, Qt, Houdini, OpenGL, SCons, CUDA

Experience

Professional.....

Blizzard Animation, Blizzard Entertainment

Software Engineer, R&D Pipeline Team

Irvine, CA

2016–present

Developer tools, primarily concerning automating Git workflow, for a technical staff in support of producing short form animations. Designed a continuous testing system for software packages, leveraging an existing unit test system, Pylint, and a custom tool for enforcing studio policies. Maintained a SCons-based build system and co-maintained the studio scene building tool.

School of Computing, Clemson University

Graduate Lab Assistant

Clemson, SC

2013–2016

Lead developer for Buffet, a web-based automatic version control and database provisioning application. It has several collaboration features so users can share and browse code. Also a major contributor to three open-source libraries used by Buffet involving version control system abstraction and SSH key management. Administrated hundreds of Linux desktops and servers used for both classroom and film production purposes.

Center for Materials for Information Technology

Student Lab Assistant

Tuscaloosa, AL

2007–2011

Research.....

Clemson University

Dissertation Research (3 publications)

Clemson, SC

2014–2016

Created and implemented algorithms for simulating multiple scattering physics in radiative transfer via a novel Monte Carlo technique. Created a high throughput computing workflow for distributing the workload across multiple computing clusters and thousands of nodes. Currently, conducting parameter studies to better understand the multiple scattering technique.

Clemson University

Directed Projects

Clemson, SC

2013

Implemented a plug-in using Blender nodes API for volume modeling, grid computation, and rendering for an arbitrary volume renderer. The node-based language is sophisticated enough to describe simple fluid simulations.

The University of Alabama

Graduate Research Assistant (6 publications)

Tuscaloosa, AL

Summer 2012

Teaching.....

Clemson University <i>Graduate Teaching Assistant</i>	Clemson, SC 2012
The University of Alabama <i>Graduate Teaching Assistant</i>	Tuscaloosa, AL 2011–2012

Honors and Awards

Clemson University <i>Professional Enrichment Grant Recipient</i>	2015
Clemson University <i>Upsilon Pi Epsilon National Honor Society</i>	2013
The University of Alabama <i>ACM Outstanding Graduate Student</i>	2012
The University of Alabama <i>University Honors Program</i>	2007–2011
The University of Alabama <i>ACM Outstanding Undergraduate</i>	2010
The University of Alabama <i>Upsilon Pi Epsilon National Honor Society</i>	2009
The University of Alabama <i>Outstanding Junior in Computer Science</i>	2009

Membership and Service

Graduate Student Government <i>Senator</i>	Clemson University 2015
School of Computing Graduate Student Association <i>Vice President</i>	Clemson University 2015
Graduate School Professional Enrichment Grant <i>Reviewer</i>	Clemson University 2014
Journal of Software Engineering for Robotics <i>Reviewer</i>	2013
IEEE/RSJ International Conference on Intelligent Robots and Systems <i>Reviewer</i>	2012
ACM Student Chapter <i>Publicity Chair</i>	The University of Alabama 2011–2012
ACM Student Chapter <i>Member</i>	The University of Alabama 2009–2012
The Good Samaritan Clinic <i>Volunteer</i>	Summer 2010