

W. Taylor Holliday

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OBJECTIVE

Computer graphics software development position working with the leaders of the field.

SUMMARY

- Software engineer at Pixar Animation Studios (<http://www.pixar.com>), 5 years
- Founder at Subatomic Software (<http://subatomicsoftware.com>)
- Computer graphics research internships at Lawrence Livermore National Laboratory (<http://www.llnl.gov>)
- MS in Computer Science, UC Davis. BS in Computer Science with Honors, UC Davis.
- Strong with C, C++, Lua and OpenGL. Proficient with ObjectiveC/iOS/Cocoa, Python, Java, Qt, and Linux.

EXPERIENCE

Founder, Subatomic Software

August 2011 - Present

Designed and implemented Audulus, a real-time audio processing and synthesis application for musicians. Currently available on the Mac App Store. Coming soon for iOS. See <http://audulus.com>.

- Designed and implemented a polyphonic audio synthesis engine from scratch, with no prior DSP experience.
- Implemented a scene-graph approach to 2D GUI that enables a more interactive and fluid user interface.
- Applied software engineering and testing practices which resulted in a robust system without technical debt.

iOS Software Engineer, Inkling Systems, San Francisco

November 2011 - May 2012

- Improved visual quality and optimized performance of Inkling's iOS 3d model viewer.
- Implemented a new and robust system for updating content on iOS
- Contributed to the GUI changes required for Inkling for iPhone.

Graphics Software Engineer, Pixar

November 2006 - November 2011

Software Engineering Internship, Pixar

June 2006 - September 2006

Pixar Animation Studios, Emeryville, California

Worked on Pixar's next-generation proprietary animation software.

- Developed a real-time character pose-sculpting system with optimizations to suit character rigging workflow.
- Created a radial basis function based pose interpolation system to assist character rigging.
- Implemented various surface deformation and point weighting algorithms.
- Wrote numerous unit, regression, and performance tests.
- Created GUI customized for film production workflows.
- Worked closely with film production staff to test and deploy features.

Graphics Research Internship, Lawrence Livermore National Laboratory

June 2005 - September 2005

Graduate Student Researcher, IDAV, UC Davis, Davis, California

January 2004 - June 2006

Graphics Research Internship, Lawrence Livermore National Laboratory

June 2004 - September 2004

Developed new algorithms for computing topological properties of scientific data-sets.

See <http://wtholliday.org/thesis.pdf> for more information.

Graphics Research Internship, Lawrence Livermore National Laboratory

June 2002 - September 2002

Exploratory research into subdivision surfaces and wavelet compression.

EDUCATION

Master of Science in Computer Science, 2006

University of California, Davis

GPA of 4.0 in required classes, 3.75 overall

Bachelor of Science in Computer Science, minor in Mathematics, 2003

University of California, Davis

GPA of 3.7 on a 4.0 scale, 3.9 in major.

References will be furnished upon request.