

Christopher DeCoro

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Objective

Seeking a full-time position in a computer science-related field

Work Experience and Education

June-October 2006 ATI Research, Inc Marlboro, MA
Research Internship

- Implemented several projects that focused on applications of emerging GPU architectures
- Submitted and published a paper and book chapter exploring novel uses of the GPU (see below)

September 2003 - Present Princeton University Princeton, NJ
Ph.D. Candidate (Expected Winter 2009), Master of Arts in Computer Science

- Specializing in software and algorithms for computer graphics, 3.9 GPA
- Worked on projects in real-time shadow algorithms, reflectance and material representation, simplification of animated meshes, and shape and musical genre classification
- Awarded an AMD Research Fellowship, 2007-2008

September 1999 - April 2002 University of California, Irvine Irvine, CA
Bachelor of Science in Computer Science

- Graduated 1st in class of 250, Summa Cum Laude, with a 4.0 GPA
- Senior Paper Awarded for Outstanding Contribution to Research
- Worked on projects in view-dependent mesh simplification, and large-scale simplification using external memory

Skills

Strong Knowledge of C/C++ (>10 years), C#, Java, Matlab, x86 Assembly, OpenGL, Cg/HLSL, Unix, Windows
Working knowledge of Maya, Ruby, Perl, Bash scripting, PHP, MySQL, R, Visual Basic

Publications

- "Subtractive Shadows: A Flexible Method for Shadow Level-of-Detail," Christopher DeCoro and Szymon Rusinkiewicz, *Journal of Graphics Tools*, March 2008
- "Real-time Mesh Simplification," book chapter in *ShaderX6* Christopher DeCoro and Natalya Tatarchuk Charles River Media, Publisher. Wolfgang Engel, Editor. (2008)
- "Bayesian Aggregation for Hierarchical Genre Classification." C. DeCoro, Z. Barutcuoglu, R. Fiebrink, International Symposium on Music Information Retrieval, September 2007.
- "Stylized Shadows." C. DeCoro, F. Cole, A. Finkelstein and S. Rusinkiewicz, Symposium on Nonphotorealistic Rendering and Animation, August 2007
- "Bayesian Aggregation for Hierarchical Classification." Z. Barutcuoglu, C. DeCoro, O. Troyanskaya and R. Schapire (Princeton Computer Science Technical Report TR-785-07)
- "Real-time Mesh Simplification Using the GPU." Christopher DeCoro and Natalya Tatarchuk, Symposium on Interactive 3D Graphics, July 2007
- "Inverse Shade Trees for Non-Parametric Material Representation and Editing." J. Lawrence, A. Ben-Artzi, C. DeCoro, W. Matusik, H. Pfister, R. Ramamoorthi, S. Rusinkiewicz, in SIGGRAPH 2006
- "Hierarchical Shape Classification Using Bayesian Aggregation." Zafer Barutcuoglu and Christopher DeCoro, *Shape Modeling International*, July 2006
- "Pose-independent Simplification of Articulated Meshes." Christopher DeCoro and Szymon Rusinkiewicz, Symposium on Interactive 3D Graphics, April 2005
- "Efficient Implementation of Real-time View-dependent Multiresolution Meshing." Renato Pajarola and Christopher DeCoro, *IEEE Trans. on Visualization and Computer Graphics* (May 2004)
- "XFastMesh: Fast View-dependent Mesh Simplification from External Memory." Christopher DeCoro and Renato Pajarola, *IEEE Visualization*, September 2002
- "A Modular Client-Server Discrete Event Simulator for Networked Computers." David Wangerin, Christopher DeCoro, Luis M. Campos, Hugo Coyote and Isaac D. Scherson, 35th Annual Simulation Symposium, 2002
- "A General Purpose Discrete Event Simulator." H. Bodhanwala, L. Campos, C. Chai, C. DeCoro, K. Fowler, P. Franck, H. Nguyen, N. Patel, I. Scherson, F. Silva. Symposium on Performance Evaluation of Computer and Telecommunication Systems 2001