

# Shaun David Ramsey

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## Address:

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## Education:

Ph.D., Computer Science, University of Utah, "Material Level of Detail in a Geometric Level of Detail Framework," (expected August 2004).

B.S., Computer Science, University of Delaware, May 1999. Dean's List: Spring 1997, Fall 1997, Spring 1998, Fall 1998, Spring 1999, Advanced & First-Year Honors, Chemical Engineering Concentration.

**Courses Taught:** Introduction to C++, Programming Languages, Computer Architecture.

**Graduate Courses:** Image Synthesis, Wavelets and Multiresolution Modeling, Data Communications and Networking, Advanced Computer Architecture, Natural Language Processing, Programming Languages and Semantics, Foundations of Computer Science, Artificial Intelligence, Database Systems.

**Undergraduate Courses:** Calculus A-C, Ordinary Differential Equations, Intro Computer Science (C++), Data Structures, Machine Org & Microcomputers, Logic & Programming, Intro to Combination Logic, Discrete Math I & II, Programming Paradigms, Computer Architecture, Computer Graphics, Intro to Sequential Circuits, Algorithms & Adv Programming, Computer Networks, Computers Ethics & Society, Technical Writing, Operating Systems, Compiler Design, Statistical Methods.

## Experience:

Assistant Professor, Washington College, August 2004. Tenure track faculty position in which I will teach Introduction to C++, Programming Languages, and Computer Architecture.

Star-Ray Interactive Ray-Tracer Developer, Univ. of Utah, 2002. An interactive ray-tracing demo at SIGGRAPH 2002 (SGI-booth). One of eight graduate students to help enhance and stabilize the Utah real-time ray-tracer for interactive, scalable, and flexible use.

Graduate Student Advisory Committee Chair, Univ. of Utah, 2001-2002. Ensured duties were performed by other GradSAC members, while performing the same duties as a member (see below).

Graduate Student Advisory Committee Member, Univ. of Utah, 2000-2001. Liaison between graduate students and faculty. Collected, reviewed and presented (in writing) graduate student input on the Retention/Promotion/Tenure (RPT) process. Attended faculty meetings to present material to students. Also, collected student opinions to present to faculty.

Teaching Assistant, Advanced Computer Graphics, University of Utah, Spring 2000 and Spring 2001. Assisted in lecturing and developing assignments. Topics included ray tracing, texture mapping, environment mapping, shading, and lighting. Also covered specific OpenGL implementations on these topics in detail.

Teaching Assistant, Introduction to Computer Graphics, University of Utah, Fall 1999 and Fall 2000. Assisted in lecturing and developing assignments. Topics included scan converting, filling, clipping, anti-aliasing, illumination, shading, projections, views, back-face culling, and z-buffers. Line and circle rasterization was also covered and implemented.

Software Engineer, Army Research Labs, Adelphi, MD, 1998. Performed analysis on SYSTRAN translations. Developed a GISTER and used other NLP techniques to verify ongoing translation research.

Undergraduate Research, University of Delaware, Newark, DE, 1998-1999. Worked to improve facial animation performance in MPEG-4. Developed smooth interpolation for dropped packets/frames.

Software Engineer, University of Delaware, Newark, DE, 1997-1999. Programmed Visual Basic to interact with a microscope and camera to adjust the microscope, take digital images, analyze the images, and lastly store this information in a spreadsheet. Another project involved converting existing FORTRAN code and developing new software to perform numerical analysis.

Senior Site Consultant, Morris Library Microcomputing, Newark, DE, 1996-1998. A senior position at the Univ. of Delaware's main library computing site. Assisted users with questions concerning UNIX, the Novell network, TCP/IP networking/setup, and many software applications such as Office, Mathematica, Maple. As a senior consultant, I worked unsupervised, opened closed the site, led by example, and had a greater knowledge of site operation and software.

#### **Reviewer:**

Visualization 2001 Reviewer, Univ. of Utah, 2001.

Siggraph 2004 Reviewer, Univ. of Utah, 2004.

#### **Refereed Publications:**

1. S. D. Ramsey, M. Bertram, C. Hansen, "Simplification of Arbitrary Polyhedral Meshes," *CGIM* 2003.
2. S. D. Ramsey, T. Johnson, C. Hansen, "Adaptive Temporal Tone Mapping," to appear in *CGIM* 2004.
3. S. D. Ramsey, C. Hansen, "Material Transitions in a Level-of-Detail Hierarchy," to be submitted.
4. S. D. Ramsey, B. Budge, C. Hansen, "Imperfection Volumes in Photorealistic Images," to be submitted.

#### **Journal Publications:**

1. S. D. Ramsey, K. Potter, C. Hansen, "Ray Bilinear Patch Intersections," to appear in *JGT*.

## References:

### **Charles Hansen, Ph.D.**

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