

Name: **Donald P. Greenberg**

Title: Director, Program of Computer Graphics; Jacob Schurman Professor of Computer Graphics

Office: 580 Rhodes Hall

Phone: 607-255-7444

Email: dpg5@cornell.edu

University Activities

- Director, Program of Computer Graphics Graduate Fields
- Architecture Science, Computer Science, Computing & Information Science, Structural Engineering, Johnson Graduate School of Management Professional Activities
- Computing & Information Science Council Provost's Committee on Digital Arts & Culture Cornell University Center for Advanced Computing (CAC) Advisory Committee

Publications

- Greenberg, D. P. (2008). Automated Vascular Geometric Analysis of Aortic Aneurysms. IEEE Computer Graphics and Applications (May/June). May 2009
- Goel, V., Greenberg, D. P., Greenberg, R. (2008). Mathematical Analysis of DICOM CT Datasets: Can Endograft Sizing be Automated for Complex Anatomy? Journal of Vascular Surgery.
- Vance, E., Greenberg, D. P. (2008). Extinct, Maybe, but Digitally in Flight (44th ed., vol. 54). The Chronicle of Higher Education. (Cited Research)
- A Novel Approach to Verify Existence of the Ivory-billed Woodpecker, Science (in progress)

Film:

- The Lord God Bird, DC Environmental Film Festival 2008, Directed by: George Butler, National Geographic Society, March 14, 2008.

Lectures

- Greenberg, D. P., First ACM Siggraph Asian Conference Keynote Speaker, "The Expanding Boundaries of Computer Graphics," Association for Computing Machinery (ACM), Singapore. (December 10, 2008).
- Greenberg, D. P., Hans Bethe House Talk, "Computer Graphics, From Animation to Physics, From Medicine to Ornithology, or Why you don't have to pick a major too early, A Personal Story," Hans Bethe House, Ithaca, NY. (November 10, 2008).
- Greenberg, D. P., OSA Frontiers in Optics 2009, "Problems in Physically-Based Simulations of Real-World Environments," Optical Society of America, San Jose, CA (to be given). (October 11, 2009).
- Greenberg, D. P., The University of Trinidad and Tobago Centre for Information Communications Technology Advisory Roundtable, "Disruptive Computer Science May 2009 Technologies," University of Trinidad and Tobago, Trinidad. (March 17, 2009).

- Greenberg, D. P., The University of Trinidad and Tobago Distinguished Lecture Series, "Computer Animation: From 2D to 3D, How We Got Here and Where We Are Going," The University of Trinidad and Tobago, Trinidad. (March 12, 2009).
- Greenberg, D. P., i3D 2009 Conference Keynote Speaker (Interactive 3D Graphics and Games), "A Perspective on Perspective or How We Interpret 3D from 2D," ACM Siggraph, Boston, MA. (March 1, 2009).

Individual Research Activities:

- Greenberg, Donald P. (Principal), "Beyond Polygons & Pixels: New Paradigms for Real-Time, Physically-Based Rendering," Sponsored by National Science Foundation, Federal, (approx. \$2.75M)
- Greenberg, Donald P. (Principal), "Interactive Global Illumination," Sponsored by Autodesk, - (\$200 k)
- Greenberg, Donald P. (Principal), "Classrooms and Design Studios of the Future," Sponsored by Autodesk, -(\$150 k)
- Greenberg, Donald P. (Principal), "Material Databases," Sponsored by Autodesk, -(\$150k)
- Greenberg, Donald P. (Principal), Pratt, Kevin (Principal), Cupkova, Dana (Co-Principal), Torrance, Ken (Co-Principal), "Integrated Digital Design Environment for Sustainable Future," Sponsored by Cornell Center for a Sustainable Future's, \$148,961.00.
- Greenberg, Donald P. (Principal), "Animation Research," Sponsored by Pixar, (\$15k)
- Greenberg, Donald P. (Principal), Bala, Kavita (Principal), "Algorithms for Animation Production," Sponsored by DreamWorks, \$35,000.00. (February 1,2009-Present).
- Greenberg, Donald P. (Principal), "Collaboration for Cluster Computing (Equipment)," Sponsored by Intel-Microsoft-Dell, approximately, (Equipment contribution approx. \$152,731)
- Greenberg, Donald P. (Principal), "Physically-Based Simulation of Avian Flight," Sponsored by Cornell Ornithology Lab, (continuing)