

David Gallup - Curriculum Vitae

Contact Information

email: gallup@cs.unc.edu
phone: (919) 843-7418
address: Campus Box 3175, Sitterson Hall
UNC-Chapel Hill
Chapel Hill, NC 27599-3175 USA
web: <http://www.cs.unc.edu/~gallup>

Research Interests

- Computer Vision
 - Stereo and Scene Reconstruction
 - 3D from Video
- Computer Graphics

Education

- *(Current) Ph.D., Computer Science, University of North Carolina.*
Advisors: Prof. Marc Pollefeys, Prof. Jan-Michael Frahm. May 2005 - Present
- *BS Honors, Computer Science, University of Utah.*
Honors advisor: Prof. Peter Shirley. May 2005

Professional Experience

- *Research Assistant, May 2005 - Present*
Computer Science Department, University of North Carolina
Advisors: Prof. Marc Pollefeys, Prof. Jan-Michael Frahm
Work: 3D reconstruction from video employing GPU-based algorithms for real-time performance.
- *Undergraduate Research Assistant, May 2004-May 2005*
Computer Science Department, University of Utah.
Advisor: Prof. Peter Shirley
Work: Explored terrain visualization using non-photorealistic rendering.
- *Undergraduate Research Assistant, September 2004-March 2005*
Computer Science Department, University of Utah.
Advisor: Prof. John Regehr
Work: Tested stack overflow detection software for embedded systems.
- *Software Engineer, Jan 2002-Sep 2004*
Information Access Technology
Salt Lake City, UT
Supervisor: Randy Cooper
Work: Developed software for call center systems.

Publications (Major Contribution)

- **David Gallup**, Jan-Michael Frahm, Philippos Mordohai, Marc Pollefeys, “*Variable Baseline/Resolution Stereo*”, CVPR 2008.
- **David Gallup**, Jan-Michael Frahm, Philippos Mordohai, Marc Pollefeys, “*Real-time Planesweeping Stereo with Multiple Sweeping Directions*”, CVPR 2007.
- S.J. Kim, **D. Gallup**, J.M. Frahm, A. Akbarzadeh, Q. Yang, R. Yang, D. Nister, M. Pollefeys, “*Gain Adaptive Real-Time Stereo Streaming*”, ICVS 2007.

Publications (Minor Contribution)

- M. Pollefeys, D. Nistér, J.-M. Frahm, A. Akbarzadeh, P. Mordohai, B. Clipp, C. Engels, **D. Gallup**, S.-J. Kim, P. Merrell, C. Salmi, S. Sinha, B. Talton, L. Wang, Q. Yang, H. Stewénus, R. Yang, G. Welch, H. Towles, “*Detailed Real-Time Urban 3D Reconstruction From Video*”, IJCV special issue on “Modeling Large-Scale 3D Scenes” (accepted).
- Amir Akbarzadeh, Jan-Michael Frahm, Phillipos Mordohai, Brian Clipp, Christopher Engels, **David Gallup**, Paul Merrell, Michael Phelps, Sudipta Sinha, Brad Talton, Liang Wang, Qing-Xiong Yang, Henrik Stewénus, Ruigang Yang, Greg Welch, Herman Towles, David Nistér, Marc Pollefeys, “*Towards Urban 3D Reconstruction from Video*”, Invited Paper, 3DPVT 2006.
- Peter Shirley, William Thompson, Sean Curtis, and **David Gallup**. “*Stylized Browsing in Space and Time*”, VAST2004: The 5th International Symposium on Virtual Reality, Archaeology and Cultural Heritage, December 2004.

Note: CVPR (IEEE Conference on Computer Vision and Pattern Recognition) is one of the three premier publication venues in computer vision.

Honors and Awards

- Best Demo Award, "Real Time 3D Reconstruction of Urban Environments", CVPR 2007, (with collaborators)
- Graduation Honors, May 2005
- Honors at Entrance Scholarship, University of Utah
- National Merit Semifinalist