Rahul Garg

Research Engineer Flutter Inc. 47, Maiden Lane, San Francisco Ph:(206) 708 5975 http://www.rahulgarg.co email: rahul@flutterapp.com

Education

• University of Washington, Seattle, WA

2007 - 2012

Ph.D. in Computer Science and Engineering

Advisor: Prof. Steven M. Seitz Thesis: Unstructured Image Mosaics

• Indian Institute of Technology (IIT) Delhi, India

2003 - 2007

Bachelor of Technology in Computer Science and Engineering

GPA: 9.91/10.0, President's Gold Medal

Highest GPA amongst all outgoing B.Tech. students across all majors

All India Rank 7 among 172000 candidates in IIT-Joint Entrance Exam. 2003

Experience

• Research Engineer at Flutter, San Francisco

April 2012 - Present

Gesture recognition startup, one of the first employees. Sped up recognition by over **10X**, automated training data collection, named co-inventor on **3 patents** including new state-of-the-art image feature, developed across OS X, Win, Linux, iOS, Android, Chrome (NaCl and JS extension).

• Software Engineering Intern at Google Seattle

June 2011 - September 2011

Prototyped an Android app that allows the user to take overlapping photos of a scene and browse them in an interactive viewer. US patent pending.

• Software Engineering Intern at Google Seattle

March 2010 - September 2010

Implemented and launched the *Face Movie* feature included in Picasa 3.8 in just 4 months. US patent pending. Extensively covered in press. Demo video has 1.5 million views on YouTube. Thousands of user created face movies uploaded to YouTube.

 Research Intern at Microsoft Research Redmond Mentor: Dr. Richard Szeliski June 2008 - September 2008

Designed custom features for matching and 3D reconstruction of man made scenes from photos.

• Research Intern at Microsoft Research India

May 2006 - July 2006

Developed locally invariant fractal features for statistical analysis and classification of textures. Published at ICCV 2007.

Honors and Awards

- 6 publications (2 at SIGGRAPH, 2 at ICCV).
- Reviewer: SIGGRAPH'13, ICVGIP (2010, 2012).
- Talks: SIGGRAPH (2008, 2011). Invited speaker at IIT Delhi, September 2008.
- NVIDIA Fellowship: 2009-2010.
- Programming Contests: Top 12 in TopCoder Open 2008 Marathon competition (international event), Top 500 in Google Code Jam 2008, Top 50 in Google Code Jam India 2006
- Rank 1 in Common Engineering Test (Delhi) 2003, Rank 18 in All India Engineering Entrance Examination 2003.

Publications

- R. Garg and S.M. Seitz. **Dynamic Mosaics**, In Proc. of 3D Imaging, Modeling, Processing, Visualization, Transmission Conference (3DIMPVT), 2012
- I. Kemelmacher-Shlizerman, E. Shechtman, R. Garg and S.M. Seitz. **Exploring Photobios**, ACM Transactions on Graphics (Proceedings of SIGGRAPH 2011)
- R. Garg, D. Ramanan, S.M. Seitz and N. Snavely. Where's Waldo: Matching People in Images of Crowds, In Proceedings of IEEE Conference on Computer Vision and Pattern Recognition (CVPR), Colorado Springs, June 2011
- R. Garg, H. Du, S.M. Seitz and N. Snavely. **The Dimensionality of Scene Appearance**, In Proceedings of the IEEE International Conference on Computer Vision (ICCV), Kyoto, Japan, October 2009
- N. Snavely, R. Garg, S.M. Seitz and R. Szeliski. Finding Paths through the World's Photos, ACM Transactions on Graphics (Proceedings of SIGGRAPH 2008)
- M. Varma and R. Garg. Locally Invariant Fractal Features for Statistical Texture Classification, In Proceedings of the IEEE International Conference on Computer Vision (ICCV), Rio De Janeiro, Brazil, October 2007