Kaleigh Smith

New York, U.S.A kaleigh.smith@gmail.com www.kaleighsmith.net

Education

Max Planck Institute for Informatics - Saarbrücken, Germany

Doctor of Philosophy (Ph.D.) - Computer Science (Dr-Ing.) Research in computer graphics under the supervision of Dr. Karol Myszkowski, from June 2005 to December 2008, graduated summa cum laude.

McGill University - Montreal, Quebec

Ph.D. candidate - Computer Science Studies and research in computer graphics under the supervision of Dr. Allison Klein, from 2003 to May 2005.

McGill University - Montreal, Quebec

Master of Science (M.Sc.) - Computer Science Graduated on Dean's Honour List in June 2003. Computer science studies and research in bioinformatics under the supervision of Dr. Michael Hallett.

University of Manitoba - Winnipeg, Manitoba

Bachelor of Computer Science (B.C.Sc.) Graduated with Honours in 2001. Focus on algorithm design and artificial intelligence.

Experience

Google - New York, U.S.A.

October 2010 to Present Software engineer working in the Geo team on Maps and structured data quality.

Google - Zurich, Switzerland

January 2009 to October 2010 Software engineer working in the Geo team on PlacePage and structured data quality.

Max Planck Institute for Informatics - Saarbrücken, Germany

June 2005 to December 2008 Researcher and graduate student in the field of Computer Graphics, specifically image processing, computational photography, non-photorealistic rendering, perception and animation.

INRIA Rhône-Alpes (Institut National de Recherche en Informatique et en Automatique) - Grenoble, France October 2006 to April 2007

Visiting researcher to the ARTIS (Acquisition, Representation and Transformations for Image Synthesis) group in the field of Computer Graphics, specifically non-photorealistic rendering, image analysis and realistic rendering.

McGill School of Computer Science - Montreal, Canada

September 2003 to June 2005 Researcher and graduate student at McGill's School of Computer Science in the field of computer graphics.

McGill Centre for Bioinformatics - Montreal, Canada

March 2001 to June 2003

Full time researcher and as of September 2001, graduate student at McGill's School of Computer Science Computational Biology Lab at the McGill Centre for Bioinformatics.

McGill School of Computer Science - Montreal, Canada

September 2001 to April 2004

Teaching assistant for a variety of courses offered by McGill School of Computer Science. The position included the

preparation and execution of tutorials, preparation of assignment and exam solutions.

Institute for Biodiagnostics, National Research Council - Winnipeg, Canada

May to August 2000

Full time co-op student for the IBD working in the Informatics Department. The work involved research on brain and image warping techniques and brain MRI analysis software (Java).

Communications Security Establishment - Ottawa, Canada

Subsidiary of the Canadian Department of Defence

September to December 1999

Full time co-op student for CSE working in the Mathematical Research Office. The work involved the implementation and testing of secure networks (Assembly and C/C++).

Selected Publications

3D Unsharp Masking for Scene Coherent Enhancement. **Contours and Contrast**. A thesis for obtaining the title of Doctor of Engineering. Kaleigh Smith. December 11th, 2008

3D Unsharp Masking for Scene Coherent Enhancement. Tobias Ritschel, Kaleigh Smith, Matthias Ihrke, Thorsten Grosch, Karol Myszkowski and Hans-Peter Seidel. ACM SIGGRAPH 2008.

Apparent Greyscale: A Simple and Fast Conversion to Perceptually Accurate Images and Video. Kaleigh Smith, Pierre-Edouard Landes, Jelle Thollot and Karol Myszkowski. Eurographics 2008.

Beyond Tone Mapping: Enhanced Depiction of Tone Mapped HDR Images. Kaleigh Smith, Grzegorz Krawczyk, Karol Myszkowski and Hans-Peter Seidel. Eurographics 2006.

A Spectral Approach to NPR Packing. Ketan Dalal, Allison Klein, Yunjun Liu and Kaleigh Smith. NPAR 2006: The 4th International Symposium on Non-Photorealistic Animation and Rendering.

Animosaics. Kaleigh Smith, Yunjun Liu, and Allison Klein. McGill University. ACM SIGGRAPH/Eurographics Symposium on Computer Animation, 2005.

Finding Odd Cycle Transversals. Bruce Reed, Kaleigh Smith, and Adrian Vetta. Finding Odd Cycle Transversals. Operations Research Letters, 2004

Towards Quality Control for DNA Microarrays. Kaleigh Smith and Michael Hallett. Towards Quality Control for DNA Microarrays. Journal of Computational Biology, 2004.

Awards & Involvement

- · 3rd Best Paper Award, Eurographics 2008, for Apparent Greyscale work.
- · International Max Planck Research Schools (IMPRS) Doctoral scholarship June 2005 May 2008.
- Natural Sciences and Engineering Research Council of Canada (NSERC) Doctoral scholarship September 2003 to August 2005