

# CHARLES S. HAN

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**RESEARCH INTERESTS** My research focuses on finding principled representations and efficient algorithms for computer graphics that operate well across a wide range of visual scales.

**EDUCATION** **Columbia University**, New York, NY. 1/2009 – 6/2011  
· Ph.D. in Computer Science.  
· Doctoral thesis: *Synthesis, Editing, and Rendering of Multiscale Textures*.

**Columbia University**, New York, NY. 1/2006 – 12/2008  
· M.S. in Computer Science.  
· GPA: 3.84

**Massachusetts Institute of Technology (MIT)**, Cambridge, MA. 9/2001 – 5/2005  
· B.S. in Computer Science and Engineering.  
· Major GPA: 4.8; Overall GPA: 4.7.

**PUBLICATIONS** *Optimizing Continuity in Multiscale Imagery*. Charles Han and Hugues Hoppe. ACM Transactions on Graphics (Proceedings of SIGGRAPH Asia 2010).

*Synthesizing Structured Image Hybrids*. Eric Risser, Charles Han, Rozenn Dahyot, Eitan Grinspun. ACM Transactions on Graphics (Proceedings of SIGGRAPH 2010).

*Multiscale Texture Synthesis*. Charles Han, Eric Risser, Ravi Ramamoorthi, Eitan Grinspun. ACM Transactions on Graphics (Proceedings of SIGGRAPH 2008).

*Frequency Domain Normal Map Filtering*. Charles Han, Bo Sun, Ravi Ramamoorthi, Eitan Grinspun. ACM Transactions on Graphics (Proceedings of SIGGRAPH 2007).

**RESEARCH EXPERIENCE** **Columbia Computer Graphics Group**, New York, NY. 1/2006 – present  
*Graduate Researcher* — Co-advised by Profs. Eitan Grinspun and Ravi Ramamoorthi.

**Microsoft Research**, Redmond, WA. 6/2009 – 8/2009  
*Intern* — Worked with Dr. Hugues Hoppe and Matt Uyttendaele. To develop new methods for interscale image interpolation.

**MIT Computer Graphics Group**, Cambridge, MA. 1/2004 – 5/2005  
*Undergraduate Researcher* — Worked with Prof. Jovan Popović on projects in spatial deformation and compatible triangulations.

**PROFESSIONAL EXPERIENCE** **Weta Digital**, Wellington, New Zealand. 2/2009 – 5/2009  
*Intern* — Collaborated with developers and artists in researching tools and methods for interactive multiscale texture design.

**Advanced Micro Devices (AMD)**, Marlborough, MA. 6/2008 – 8/2008  
*Co-op* — Developed a GPU implementation for real-time multiscale texture synthesis.

**Canon Development Americas**, Irvine, CA. 2002, 2003  
*Software Engineering Intern* — Designed and implemented systems for: print stream translation on embedded devices; automated generation and delivery of business documents; and improvement of network administration tools.

**ShoeImage.com**, United Kingdom. 2000  
*Web Developer* — Constructed and maintained online storefront and product database.

- AWARDS AND HONORS    Microsoft Research Fellowship (2010-11)  
                                  ATI Fellowship (2008-09)  
                                  MIT Emerson Music Scholarship (2001-02, 2003-04)  
                                  National Merit Scholarship (2001)
- PEER REVIEW SERVICE    ACM SIGGRAPH Papers (2011, 2010, 2008)  
                                  ACM Transactions on Graphics (2011, 2010, 2009)  
                                  Eurographics Conference (2011, 2010)  
                                  ACM SIGGRAPH Asia Papers (2010)  
                                  IEEE Transactions on Pattern Analysis and Machine Intelligence (2010, 2009)  
                                  IEEE Computer Graphics and Applications (2010)  
                                  Computer Graphics Forum (2009)  
                                  ACM SIGGRAPH Sketches (2007)
- OTHER EXPERIENCE    *Teaching Assistant* (2009) — Columbia University COMS4160, Computer Graphics.  
                                  *Pirate* (2005-06) — Appeared in *Pirates of the Caribbean: At World's End*.  
                                  *Departmental Tutor* (2002) — MIT 6.001, Structure and Interpretation of Computer Programs.
- ACTIVITIES    *Poker* (Winner, 2009 North Island Poker Championship, Auckland, NZ). *Cello* (Principal cellist, MIT Symphony Orchestra). *Phi Kappa Theta fraternity* (Vice President; Recruitment Chair).
- REFERENCES    *Available upon request.*