Simon Breslav

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☐ EDUCATION

University of Toronto — Toronto, Canada
M.Sc. in Computer Science (computer graphics concentration) — September 2008 - May 2010 (expected)
Advisor: **Dr. Aaron Hertzmann**
Thesis work: A new rendering technique for creating animations of 3D scenes in a range of fexible, non-photorealistic styles designed to produce temporally coherent animations that resemble hand-made drawings, prints, and paintings.

University of Michigan — Ann Arbor, MI
B. Sc. in Computer Science — September 2002 - May 2006
Undergraduate Research: Under **Dr. Lee Markosian's** supervision, led a group project in artisitic rendering resulting in a SIGGRAPH 2007 publication.

☐ PUBLICATIONS

○ **Towards the Photonic Nose: A Novel Platform for Molecule and Bacteria Identification.** — Advanced Materials 2009
Leonardo D. Bonifacio, Daniel P. Puzzo, **Simon Breslav**, Barbara M. Willey, Allison McGeer, Geoffrey A. Ozin.

○ **Dynamic 2D Patterns for Shading 3D Scenes.** — **SIGGRAPH 2007**
Simon Breslav, Karol Szerzen, Lee Markosian, Pascal Barla, Joëlle Thollot.

○ **Stroke Pattern Analysis and Synthesis.** — **Eurographics 2006**
Pascal Barla, **Simon Breslav**, Joëlle Thollot, François Sillion, Lee Markosian.

○ **Interactive Hatching and Stippling by Example.** — Technical Report , INRIA - 2006
Pascal Barla, **Simon Breslav**, Joëlle Thollot, Lee Markosian.

☐ RELEVANT EXPERIENCE

Research Intern — June 2009-August 2009
Adobe Creative Technology Lab (reporting to Dr. David Salesin) — Seattle, WA
○ Under the mentorship of Dr. Holger Winnemöller, independently researched and implemented an image-based hair analysis, design, and manipulation framework using **C++** and **MATLAB**.

Software Engineer, New Product Technology Group — April 2008 - June 2008
Software Engineer, Application Technology Group — July 2006 - April 2008
Thomson Reuters (Formerly Thomson West) — Eagan, MN
○ Worked on several high-impact projects improving Westlaw.com, a search engine for legal content used by over 100,000 legal professionals.
○ Developed and supported publicly visible interfaces as well as backend web services using **C#, Javascript/AJAX, XHTML, CSS, XSL**.
○ Implemented projects both individually and as part of teams using traditional waterfall and agile (Scrum) development process.

Assistant in Research — February 2004 - June 2006
University of Michigan College of Engineering — Ann Arbor, MI
○ Led and collaborated on various 3D graphics related projects in the areas of non-photorealistic rendering and pattern synthesis.
○ Extended and maintained *jot-lib*, an open source collection of **C++/OpenGL** libraries and **GLSL** shaders used for 3D graphics research.

Intern Developer — May 2005 - August 2005
Auryn Animation Studio — Los Angeles, CA
○ Independently extended proprietary software used in production using **C++** and **OpenGL**.
○ Developed Maya **MEL** Scripts and **C++** plug-ins used by animators in production of short animated films.

Illustrator — June 2004 - August 2004
Right Brain Books, LLC — Farmington Hills, MI
○ Independently produced ten fairytale illustrations for a book *The Search For Unrational Leadership* by Charles Fleetham.

☐ TECHNICAL & ARTISTIC SKILLS

○ Working in teams and independently in academic and industrial settings.
○ Experienced in **C/C++** (5+ years) **, C#** (2 years), **MATLAB** (2 years)**, Javascript** (2 years).
○ Familiar with **Python, ActionScript 3, Java, OpenGL/GLSL, SQL, XHTML, CSS, XSL, Maya API/MEL**.
○ Development experience on **Mac OS X, Windows, and Linux** platforms using **nVidia** and **ATI** video cards.
○ Experience producing **Story Illustrations** and **Comics**.

☐ VOLUTEER EXPERIENCE

Weekly Mentorship Program Volunteer — September 2007-May 2008
Free Arts Minnesota, St. Joseph's Home for Children — Minneapolis, MN
○ With a small team of volunteers, provided two hours per week of creative art activities to a group of at-risk children ages 8-13.