

BONNEEL Nicolas

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CANADA

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Key facts:

- Currently, postdoctoral researcher at UBC (Vancouver)
- 9 articles in peer-reviewed international journals and conferences since 2007, including one ACM TOG/Siggraph paper.

EDUCATION

2009-2010	Postdoc at the University of British Columbia (Vancouver, Canada), Under the supervision of Michiel van de Panne . Until November 30 th , 2010.
2006-2009	PhD at INRIA Sophia Antipolis (FR), in REVES team (REndering and Virtual Environments with Sound), under the supervision of George Drettakis . Working on " Audio and Visual Rendering with Perceptual Foundations ", for the European project CROSSMOD .
2005-2006	Master's Degree in Computer Graphics at University Paul Sabatier in Toulouse.
2003-2006	Engineering degree at INSA (Institut National des Sciences Appliquées), Toulouse. Applied Mathematics department , <i>Numerical methods and models</i>
2001-2003	Student at INSA , Toulouse. General studies.

PUBLICATIONS – see details at <http://cs.ubc.ca/~nbonneel/publications.html>

International Journals

Cabral, M., Bonneel, N., Lefebvre, S., Drettakis, G., [Relighting Photographs of Tree Canopies](#). *Undergoing a minor revision cycle to IEE Transactions on Visualization and Computer Graphics*.

Bonneel, N., Suied, C., Viaud-Delmon, I., Drettakis, G. 2010. [Bimodal perception of audio-visual material properties for virtual environments](#). In *ACM Transactions on Applied Perception*, 7(1), 1-16

Bonneel, N., Paris, S., van de Panne, M., Durand, F., Drettakis, G. 2009. [Single Photo Estimation of Hair Appearance](#). In *Computer Graphics Forum (Proceedings of EGSR)*. 28 (4), 1171-1180

Suied, C., Bonneel, N., Viaud-Delmon, I. 2009. [Integration of auditory and visual information in the recognition of realistic objects](#). In *Experimental Brain Research*, 194 (1), 91-102

Bonneel, N., Drettakis, G., Tsingos, N., Viaud-Delmon, I., James, D. 2008. [Fast Modal Sounds with Scalable Frequency-Domain Synthesis](#). In *ACM Transactions on Graphics (SIGGRAPH)*. 27 (3), 1-9

Peer-Reviewed International Conferences

Bonneel, N., van de Panne, M., Lefebvre, S., Drettakis, G. 2010. [Proxy-Guided Texture Synthesis for Rendering Natural Scenes](#). In *Vision, Modeling and Visualization (VMV'2010)*.

Grelaud, D., Bonneel, N., Wimmer, M., Asselot, M., Drettakis, G. 2009. [Efficient and Practical Audio-Visual Rendering for Games using Crossmodal Perception](#). In *ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games (I3D)*

Viaud-Delmon, I., Znaïdi, F., Bonneel, N., Doukhan, D., Suied, C., Warusfel, O., N'Guyen, K-V., Drettakis, G. 2008. [Auditory-Visual Virtual Environments to treat Dog Phobia](#). In *International Conference Series on Disability, Virtual Reality and Associated Technologies*

Drettakis, G., Bonneel, N., Dachsbacher, C., Lefebvre, S., Schwarz, M., Viaud-Delmon, I. 2007. [An Interactive Perceptual Rendering Pipeline using Contrast and Spatial Masking](#). In *Eurographics Symposium on Rendering (EGSR)*

Moeck, T., Bonneel, N., Tsingos, N., Drettakis, G., Viaud-Delmon, I., Alloza, D. 2007. [Progressive perceptual audio rendering of complex scenes](#). In *ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games (I3D)*

Other Conferences and Tech. Reports

Suied, C. Bonneel, N. & Viaud-Delmon, I. 2008. [Integration of auditory and visual information in fast recognition of realistic objects](#). In *Frontiers in Human Neuroscience, Conference Abstract: 10th International Conference on Cognitive Neuroscience*.

Suied, C., Bonneel, N. & Viaud-Delmon, I. 2008 [The role of auditory-visual integration in object recognition](#). In *Journal of the Acoustical Society of America*. 123 (5), p. 3568.

Bonneel, N., van de Panne, M., Lefebvre, S., Drettakis, G. 2010. [Proxy-Guided Texture Synthesis for Rendering Natural Scenes](#). *INRIA Research Report number 7298*.

Bonneel, N., Suied, C., Viaud-Delmon, I., Drettakis, G. 2008. [Bimodal perception of audio-visual material properties for virtual environments](#). *INRIA Research Report number 6687*.

EXPERIENCE

2008 (1 month)	Internship at MIT-CSAIL, Boston (MA). Work on <i>capturing hair reflectance from a photograph</i> . Supervised by Frédo Durand .
2006 (6 months)	Master's Degree internship at IRIT , Toulouse (FR), under the supervision of Mathias Paulin in the SIRV team (Image Synthesis and Virtual Reality). Work on <i>realtime visualization of globally illuminated point-based models</i> .
2005 (3 months)	Internship at the company OKTAL-Synthetic Environment , Toulouse, supervised by Paul Pitot. Work on <i>realtime visualization of dense forest</i> .
2004 (1 month)	Internship at Observatoire Midi-Pyrénées , Toulouse, supervised by Marc Monnereau. Work on a <i>convection code to integrate non divergent-free terms, a Clapeyron diagram and varying temperature to simulate Io's volcanic activity</i> .
2002 (1 month)	Internship at IRIT , Toulouse, under the supervision of Mathias Paulin Work on a <i>3D files converter</i> .

PROFESSIONAL ACTIVITIES

Reviewing	Siggraph Asia (2010), TVCG (2010), The Visual Computer (2010), Eurographics (2009), a national Czech grant.
Teaching	- OpenGL labs for Master's students (24 hours), - Co-supervision of a Master's student internship on <i>Seam Carving</i> (Emmanuelle Chapoulie).

SKILLS	
Programming	C++, Fortran, Matlab, Maple. Knowledges in Delphi and ADA.
Comp. Graphics	Ogre3D, HLSL, OpenGL. Basics in Maya modeling and motion capture (ViCon).
Math.	Optimization, Signal Processing, Numerical Analysis, Finite Elements/Differences. Knowledge in statistics and machine learning.
Languages	French (native), English (fluent), Spanish (beginner).

PERSONAL PROJECTS	
TreeGenerator (2000 and 2007)	Tree modeling software, mentioned in several magazines. http://www.treegenerator.com (2000+ unique visitors/month)
Byosphere (2002-2003)	Terrain modeling and rendering engine, including participating media. http://www.byosphere.com

HOBBIES	
Sports	<ul style="list-style-type: none"> - President of the skydiving club of my University (200+ jumps) - Judo for 14 years (brown belt) - Climbing and diving at University.
Music	Music at the "Convervatoire National de Région de Toulouse": Music theory (9 years) and Oboe (5 years).