

BONNEEL Nicolas

June 24<sup>th</sup>, 1983

5 bis chemin de Longo-Maï  
Villa l'Oranger  
06600 Antibes, FRANCE

tel. (+33)6 09 72 66 14  
[nicolas.bonneel@sophia.inria.fr](mailto:nicolas.bonneel@sophia.inria.fr)



## EDUCATION

<b>2006-2009</b>	PhD candidate at <a href="#">INRIA Sophia Antipolis</a> (FR), in <a href="#">REVES</a> team (REndering and Virtual Environments with Sound), under the supervision of <a href="#">George Drettakis</a> . Working on "Cross-Modal Perceptual Rendering for Immersive Virtual Environments", for the European project <a href="#">CROSSMOD</a> . Degree expected in Sept.09.
<b>2005-2006</b>	Master's Degree in Computer Graphics at University Paul Sabatier in Toulouse.
<b>2003-2006</b>	Engineering degree at <a href="#">INSA</a> (Institut National des Sciences Appliquées), Toulouse. <a href="#">Applied Mathematics department</a> , "Numerical methods and models"
<b>2001-2003</b>	Student at <a href="#">INSA</a> , Toulouse. General studies.

## PUBLICATIONS

<b>2009</b>	<a href="#">Single Photo Estimation of Hair Appearance</a> Bonneel, N., Paris, S., van de Panne, M., Durand, F., Drettakis, G. <i>Computer Graphics Forum (Proceedings of EGSR)</i>
<b>2009</b>	<a href="#">Efficient and Practical Audio-Visual Rendering for Games using Crossmodal Perception</a> Grelaud, D., Bonneel, N., Wimmer, M., Asselot, M., Drettakis, G. <i>ACM SIGGRAPH Symp. on Interactive 3D Graphics and Games (I3D)</i>
<b>2009</b>	<a href="#">Bimodal perception of audio-visual material properties for virtual environments</a> Bonneel, N., Suied, C., Viaud-Delmon, I., Drettakis, G. <i>ACM Transactions on Applied Perception</i>
<b>2009</b>	<a href="#">Integration of auditory and visual information in the recognition of realistic objects</a> Suied, C., Bonneel, N., Viaud-Delmon, I. <i>Experimental Brain Research</i>
<b>2008</b>	<a href="#">Auditory-Visual Virtual Environments to treat Dog Phobia</a> Viaud-Delmon, I., Znaïdi, F., Bonneel, N., Doukhan, D., Suied, C., Warusfel, O., N'Guyen, K-V., Drettakis, G. <i>International Conference Series On Disability, Virtual Reality And Associated Technologies</i>
<b>2008</b>	<a href="#">Fast Modal Sounds with Scalable Frequency-Domain Synthesis</a> Bonneel, N., Drettakis, G., Tsingos, N., Viaud-Delmon, I., James, D. <i>ACM SIGGRAPH</i>
<b>2007</b>	<a href="#">An Interactive Perceptual Rendering Pipeline using Contrast and Spatial Masking</a> Drettakis, G., Bonneel, N., Dachsbacher, C., Lefebvre, S., Schwarz, M., Viaud-

Delmon, I.  
*Eurographics Symposium on Rendering*

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

## EXPERIENCE

**2008** (1 month) Internship at MIT-CSAIL, Boston (MA). Work on capturing hair reflectance from a photograph. Supervised by [Frédéric 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 realtime visualization of globally illuminated point-based models.

**2005** (3 months) Internship at [OKTAL-Synthetic Environment](#), Toulouse, under the supervision of Paul Pitot. Work on realtime visualization of dense forest.

**2004** (1 month) Internship at [Observatoire Midi-Pyrénées](#), Toulouse, under the supervision of Marc Monnereau  
Work on a convection code to integrate non divergent-free terms, a Clapeyron diagram and varying temperature to simulate Io's volcanic activity.

**2002** (1 month) Internship at [IRIT](#), Toulouse, under the supervision of [Mathias Paulin](#)  
Work on a 3D files converter.

## SKILLS

Teaching OpenGL practical work (Master students)

Programming C++, Fortran, Matlab, Maple. Knowledges in Delphi and ADA.

CG Ogre3D, HLSL, OpenGL. Basics in Maya modeling.

Math. Optimization, Signal Processing, Numerical Analysis, Finite Elements/Differences.  
Knowledges in statistics and machine learning.

Languages French (native), English (fluent), Spanish (beginner).

## HOBBIES AND PERSONAL PROJECTS

[TreeGenerator](#) (2000 and 2007) Tree modeling software, released in several magazines.  
<http://www.treegenerator.com>

[Byosphere](#) (2002-2003) Terrain modeling and rendering engine, including participating media.  
<http://www.byosphere.com>

Sports President of the skydiving club of my University (now 200 jumps)  
Judo for 14 years (brown belt)  
Climbing and diving at University.

Music 9 years of music at the "Convervatoire National de Région de Toulouse",  
playing Oboe.