

## **2011 Alain Fournier Award for the best Canadian Computer Graphics Dissertation**

This year, Gordon Wetzstein is the recipient of the Alain Fournier Ph.D. Dissertation Award. His dissertation, entitled “Computational Plenoptic Image Acquisition and Display”, made several outstanding research contributions to computer graphics, more specifically to the fields of computational optics and photography, with exciting new multidisciplinary applications.

Gordon has worked on several inter-related projects for his dissertation, and has delivered impressive contributions. Underlying Gordon’s research is the insight that jointly designing optical components and processing algorithms allow for the development of new cameras and displays with interesting properties. For example, he has introduced new multi-layered designs for autostereoscopic 3D displays, the most recent one with dynamic displays and polarization to improve on transparency. On another project, he used an LCD as an aperture filter, thus allowing image analysis to preserve frequencies of projected images. Next, his encoding of positional-directional light patterns in color channels enabled the recovery of shapes from refractive objects. A transparent display is also used through local modulation to improve human visual system perception in different tasks. Finally, he developed a plenoptic framework to compare and provide new insights for different imaging approaches. All these contributions have appeared in top venues.

Gordon completed in 2006 a Diplom at Bauhaus-Universität in Weimar, Germany, under the supervision of Professor Oliver Bimber, and a Ph.D. in Computer Science at the University of British Columbia under the supervision of Professor Wolfgang Heidrich. He is already a workshop co-organizer of a CVPR workshop on computational cameras and displays, has served on four international conference program committees, and is a frequent paper reviewer. He has been an active volunteer in several university and conference committees. Gordon is now a postdoctoral associate at the MIT Media Lab, where he works in collaboration of Dr. Ramesh Raskar.

The “Alain Fournier Memorial Fund” was created to celebrate his life, to commemorate his accomplishments, and to honour his memory. It rewards an exceptional computer graphics Ph.D. dissertation defended in a Canadian University over the previous year. The winning dissertation is selected through a juried process by a selection committee consisting of accomplished researchers in computer graphics.

For more information about the “Alain Fournier Memorial Fund”, and information about donation, please visit <http://www.cs.ubc.ca/~fournier>

### **Previous Award Recipients**

2010 Stelian Coros  
2009 Tiberiu Popa  
2008 Samuel Hasinoff  
2007 Abhijeet Ghosh  
2006 Celine Latulipe  
2005 Michael P. Neff