

2010 Alain Fournier Award for the best Canadian Computer Graphics Dissertation

This year, Stelian Coros is the recipient of the Alain Fournier Ph.D. Dissertation Award. His dissertation, entitled “Real-Time Planning and Control for Simulated Bipedal Locomotion”, made several outstanding research contributions to computer graphics.

Stelian’s dissertation addresses the challenging problem of learning locomotion strategies for physically-simulated characters. His work makes particular contributions towards developing abstract models of step-to-step dynamics, hierarchical control policies, foot placement strategies, and internal virtual force abstractions. These allow autonomous physics-based characters to robustly perform a large variety of new skills, including locomotion across terrain with gaps, agile walking and running towards a target location, carrying heavy crates, ducking under and stepping over obstacles, and stooping to pick up objects placed at any height. A generalized locomotion controller is developed which is demonstrated to work well across a broad range of tasks, character proportions, and motion styles. The dissertation has resulted in an impressive series of publications and contains a body of work that promises to have a significant influence on physics-based character animation.

Stelian completed a Bachelor of Computing at the University of Guelph in 2006, and a Ph.D. in Computer Science at the University of British Columbia under the supervision of Professor Michiel van de Panne. As a graduate student, Stelian received several scholarships and was active in a number of leadership roles in his laboratory, department, and research community. He has even presented a SIGGRAPH ASIA conference paper on behalf of colleagues from another university who were unable to attend. After his Ph.D., Stelian joined Disney Research in Zurich as a postdoctoral researcher under the supervision of Dr. Robert Sumner.

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

2009 Tiberiu Popa
2008 Samuel Hasinoff
2007 Abhijeet Ghosh
2006 Celine Latulipe
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