

Alain Fournier Award 2015



Canadian Human-Computer Communications Society /
Société canadienne du dialogue humain-machine

On August 14th, 2000, Dr. Alain Fournier passed away. He was a leading international figure in computer graphics, and a strong and frequent contributor to the Graphics Interface conference. His insights, enthusiasm, wisdom, vast knowledge, humour, and genuine friendship touched everyone he met.

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 past 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://graphicsinterface.org/awards/alain-fournier/>.



Ibraheem Alhashim

Simon Fraser University
CHCCS/SCDHM Alain Fournier
Award Recipient 2015

Ibraheem Alhashim is the recipient of the 2015 Alain Fournier Ph.D. Dissertation Award. His dissertation, entitled Topology-Varying Shape Matching and Modeling, made exceptional research contributions to computer graphics, which will impact the field for years to come.

The thesis makes important contributions in the area of topology-varying shape correspondence and interpolation, enabling an entirely new set of shape synthesis options for plausible and nontrivial shape inbetweens. Earlier approaches have been successful in dealing with rigid alignments, near-isometric shape articulations, or nonrigid shape deformations involving part stretching. But what separates Ibraheem’s work from the state of the art is that for the first time, topological variations are brought into the equation. This allows the matching and interpolation of shapes that differ in their fundamental topology. Ibraheem’s work on deformation-driven topology-varying shape correspondence provides an unsupervised solution, where the key contribution is a novel deformation energy that drives the search for

a best part correspondence. These results have appeared in multiple prominent venues and promise to have a significant influence on the many varied fields that now utilize 3D models.

Ibraheem completed his B.Sc. with honours in Computer Science at the Portland State University in 2008, followed by his M.Sc. in Computer Science under the supervision of Dr. Hao Zhang and his Ph.D. in Computer Science under the supervision of Drs. Hao Zhang and Ghassan Hamarneh at Simon Fraser University. He has co-authored, among others, two SIGGRAPH papers, two SIGGRAPH Asia papers, and journal articles in Computer Graphics Forum and The Visual Computer. He has also been a reviewer in the top computer graphics conferences and journals. In addition to his commitment to academic publishing, Ibraheem is also dedicated to reproducible research, releasing his code, data, and the implementation details of his work as open source.