Graphics Transformations

Feb 12/18 2:30 pm

Jodrey School of Computer Science

SEMINAR PRESENTATION

Monday, February 12, 2018

2:30 - 3:30 PM

Carnegie Hall 203

Graphics Transformations

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Abstract

In many applied areas such as graphics modelling, robot motion planning, user-interfaces and computer animation, we need to transform geometric objects by changing their size, position or orientation on-screen. These changes are often accomplished by applying affine transformation operations such as translation, rotation, and scaling. The theoretical computations behind such transformation are simple, but applying such transformations to computer programming may sometimes require careful analysis.

In my talk, I will cover the basic theories of two-dimensional (2D) transformations, and demonstrate their application using the Java programming language. I hope that this talk will provide students with necessary insight to understand transformations and apply them to real-world problems.

About the Presenter

Mohammad Khalad Hasan is an NSERC post-doctoral fellow working with Dr. Edward Lank at the University of Waterloo, Canada. Khalad completed his PhD in Computer Science from the University of Manitoba under the supervision of Dr. Pourang Irani. His research focus is on developing and studying novel interactions with mobile and wearable devices. More specifically, he is interested in exploring users' needs and making an impact in their lives when it concerns efficient mobile interactivity. During his

graduate studies, he developed strong collaboration ties with academics as well as with industry partners including Honda Research, Japan and Autodesk Research, Canada. His research work has led to a number of publications, with many appearing in top-tier HCI venues which include the ACM Conference on Human Factors and Systems (ACM CHI) and the ACM Conference on User Interfaces and Technology (ACM UIST). His work has also been recognized through best paper award at ACM Symposium on Spatial User Interaction (ACM SUI) and featured in popular press via the Discovery News and New Scientist outlets. His current focus is on designing and developing novel interfaces for mobile and wearable devices to enable users' access to digital content anytime, anywhere.

Everyone is welcome to attend