

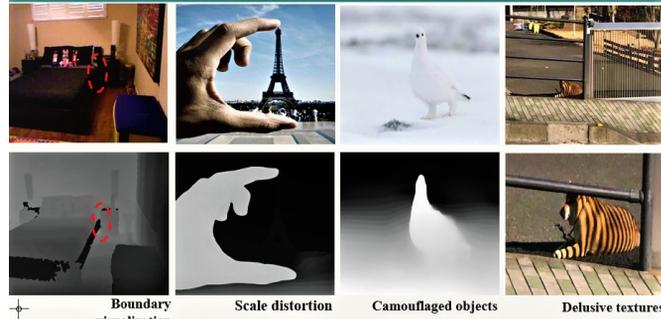
Department of Math. and Computing Science

MSc Thesis Defense

HyperInvoFusion: Depth Aware and Parameter Efficient Object Detection from RGB-D Data

Presenter: Mehfuz A. Rahman

Significance of Depth



Intel Realsense

Asus Xtion

Kinect v1

Kinect v2

Depth sensing options are increasing rapidly.



Over the last decade, there has been an upsurge in the availability of low-cost commodity depth sensors. Nowadays, a vast majority of modern devices, ranging from smartphones to conventional augmented reality devices are equipped with depth sensors. Depth images produced by such sensors contain complementary information for computer vision tasks such as object detection when used with color images. Despite the benefits, it remains a complex task to simultaneously extract photometric and depth features in real-time because of the immanent difference between depth and color images. We investigate into the use of depth weighted involution kernel for an improved object detection from RGB-D images. The defense talk will emphasize the concept of involution, depth weighted involution, and RGB-depth fusion for object detection.

April 6th, 2023

1:00 pm | Online

Email: mathcs@smu.ca for connection details