MSc Seminar

Wednesday November 21, 2018 at 4:00 PM in Reynolds, Room 2224
Classification of Brain Tumors Using Deep Learning and Mixed Reality/Augmented Reality

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ABSTRACT:

Cancer is a prevalent disease with a rising incidence worldwide. The most common misdiagnosed type of cancers are brain tumors. Early stages of brain tumor are often present with vague symptoms, making diagnosis difficult and this delay in diagnosis leads to a poor prognosis. With the rise of various imaging technologies, Mixed Reality (MR)/Augmented Reality (AR) have become disruptive technologies in recent years. Moreover, deep learning has also gained a lot of interest since it can be applied to several applications and is proven to be a powerful tool for complex problems. The goal of this study is to identify tumors such as glioblastoma (GBM), meningioma, and glioma, using a deep convolutional neural network (CNN) in different imaging modalities such as Computed Tomography (CT) and Magnetic Resonance Imaging (MRI) while integrating this with MR/AR.