

Title: Video Analytics through Edge Computing

Abstract: The ubiquity of IoT cameras such as surveillance cameras, dash mounted cameras, drone cameras, Google glass, phone cameras, and the recent advances in video analytics technology have enabled many useful applications in traffic control, surveillance, security, digital assistants, etc. Many of these applications rely on deep learning techniques which are very resource demanding. To satisfy the low latency and high resource demands, we support video analytics applications through edge computing. In this talk, I will present our TargetFinder project which locates targets through video analytics and IoT cameras. To address the resource limitation of mobile devices, techniques have been developed to determine which part of the computation is offloaded to the edge server. This talk also offers my perspective on future research challenges on video analytics through edge computing.