University of Rochester
Department of Electrical and Computer
Engineering Colloquia Series

Opportunities and Challenges of Machine Learning in Real-World Applications
(Health care, Transportation and Education)

Safwan Wshah
Palo Alto Research Center (PARC)
Xerox Corporation

Wednesday, October 26, 2016
12:00-1:00PM
Computer Studies Building (CSB) 209

Abstract: In the last few years machine learning has made its way into many areas of computer vision, voice recognition, document imaging, and data anyltics in an impressive way. An advantage of machine learning is that it can be used even in cases where it is infeasible or difficult to write down explicit rules to solve a problem. This talk will describe a number of applied machine learning projects addressing real-world problems in medical, transportation and education fields. In particular, I will describe the power of data driving machine learning algorithms to solve particular problems that analyze images and videos for classification, object detection, action understanding and domain adaptation. At the end I will discuss the opportunities and challenges of applying machine learning, video and image processing in the health care field.

Biography of Dr. Safwan Wshah

Safwan Wshah is a senior research scientist at Palo Alto Research Center – PARC, a Xerox Company in Webster, NY. His research spans machine learning, deep learning, image and video processing and pattern recognition applied to computer vision and document imaging.
He develops new machine learning methods for different types of applications such as handwriting for Xerox Ignite project, image classification inlcuding Deep neural networks for counting passengers in vehicles and real time video anyltics for surgical video warning monitor project. Safwan is currently working on video analytics in retail with applications such as customer object detection and tracking and action recognition. Dr. Wshah holds a Ph.D. in Computer Science and Engineering from State University of New York Buffalo. He has received 7 issued U.S. patents with 10 additional patents pending. He is the author of three journal publications and 14 conference proceedings.

Pizza and soda will be provided.