OPTIMIZATION SEMINAR SERIES

XIAO ZHANG, PhD

Title: Algorithms for Barrier Coverage with Wireless Sensors

Abstract: Barrier coverage is a critical problem in wireless sensor networks. In the area, we study the barrier coverage problem from two perspectives, i.e., static sensors with adjustable sensing ranges and mobile sensors with fixed sensing ranges. Specifically, in the first topic, we consider the barrier coverage problem for a line interval, in which we are given a set of sensors and the goal is to determine a range assignment with the lowest possible cost. In the second topic, we consider the problem of covering a line interval by mobile sensors such that the maximum of moving cost is minimized.

Bio: Xiao Zhang received his PhD degree from Department of Computer Science in City University of Hong Kong, Hong Kong, 2016. He was a visiting scholar with the Department of Computer Science in Utah State University, Logan, Utah, USA, in 2015. His research interests include algorithms design and analysis, wireless sensor networks.

Wednesday – October 19, 2016

UHall C620

12:00 to 12:50 pm

EVERYONE WELCOME!