Optimization Seminar Series

Monday, March 7, 2016
1:00 pm – B756

Title: Cellular Automaton Based Algorithms in Wireless Communication

Speaker: Dr. Salimur Choudhury
Mathematics and Computer Science
Algoma University, Sault Ste. Marie, Ontario

Abstract: The cellular automaton is a bioinspired model used to model different physical systems including wireless communication. One of the main advantages of using cellular automaton based algorithms is that they need very little local information to compute a solution. In this talk, several optimization problems in wireless sensor networks and RFID (radio frequency identification) networks along with the corresponding cellular automaton based algorithms will be presented. The problems include sleep-awake scheduling of sensors, mobile sensors dispersion, and elimination of redundant readers in RFID systems.

Bio: Dr. Salimur Choudhury is an assistant professor in the Department of Mathematics and Computer Science at Algoma University, Sault Ste. Marie, Ontareio. He is also an adjunct assistant professor in the school of computing at Queen's University, Kingston, Ontario. His research interests include designing algorithms for wireless communication systems including sensor networks, RFID networks, device to device communication systems, etc. Dr. Choudhury completed his PhD from the School of Computing, Queen's University in 2012 and a Masters from the Department of Mathematics and Computer Science, University of Lethbridge in 2008. He has experience of teaching at several other universities in the United States and Bangladesh. He also worked at IBM Canada software Lab in Markham, Ontario.

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