

MATHEMATICS AND COMPUTER SCIENCE

OPTIMIZATION SEMINAR SERIES

Wednesday—October 17, 2018

12:00 to 12:50 pm

ROOM: C630



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Behavior of honeybees foraging for nectar and a large scale routing protocol implementation in wireless sensor networks

Abstract:

Insect colonies are an attractive research topic for the researcher in electrical engineering and computer science who develops and designs shortest path algorithms. Bees use energy very efficiently and have the ability to find shortest routes to their source of food. Wireless sensor networks have similarities with honeybee colonies in terms of finding shortest paths for communication and consuming energy efficiently. In this presentation, we focus on an optimal method based on swarm intelligence (SI) inspired by honeybees and the behavior of honeybee foraging for nectar. Also, we analyze a routing protocol implementation in wireless sensor networks.

Biography:

Fatih Celik received his Ph.D. in Electronics and Computer Science from the University of Sakarya, Turkey. He was an Assistant Professor at Sakarya University and a visiting scholar at University of Pittsburgh, USA. His research interests include parallel and distributed simulation, modeling and simulation of large-scale networks, biologically-inspired optimization schemes, cognitive radio networks, mobile ad hoc networks and wireless sensor networks. His main research interest lies in parallel and distributed simulation and routing protocols for the wireless sensor network.

EVERYONE WELCOME!