# Kazim Selim Engin

Ph.D. Student

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#### **Education**

#### University of Minnesota

• Ph.D. Student in Computer Science and Engineering Advisor: Prof. Volkan Isler Minneapolis, MN Sept 2016 - present

# Sabancı University

B.S. in Mechatronics Engineering

Istanbul, Turkey
Sept 2012 - June 2016

## Research Experience

Robotic Sensor Networks Lab
Graduate Researcher

Minneapolis, MN Sept 2016 - present

- Designing approximation algorithms and online strategies for network formation of a multi-robot system
- Manipulation planning and perception to grasp an object of unknown pose using an RGB-D camera attached on the Kinova Mico arm
- Localization of a target using multiple UAVs equipped with bearing-only sensors

Knowledge Representation and Reasoning Group  $Undergraduate\ Researcher$ 

Istanbul, Turkey Sept 2015 - June 2016

- Developing an action planner to rearrange cluttered objects so as to grasp an initially unreachable object. The planner was implemented on the Baxter robot to manipulate tabletop objects.
- Joint Institute of Engineering, SYSU-CMU
  Undergraduate Research Intern

Guangdong, China June 2015 - Sept 2015

- Parameter identification and state of charge estimation of deteriorated batteries using adaptive unscented Kalman Filters
- Automation and Information Systems, Technical University of Munich Undergraduate Research Intern

Munich, Germany July 2014 - Sept 2014

- Traffic signalization and control using MATLAB Stateflow
- Conveyor band automation using various sensors and actuators

#### **Publications**

1. S. Engin, V. Isler, Asynchronous Network Formation in Unknown and Unbounded Environments, *International Conference on Robotics and Automation*, 2019 (in review).

- 2. S. Engin, V. Isler, Minimizing Movement to Establish the Connectivity of Randomly Deployed Robots, *International Conference on Automated Planning and Scheduling*, 2018.
- 3. H. Bayram, N. Stefas, S. Engin, V. Isler, Tracking Wildlife with Multiple UAVs: System Design, Safety and Field Experiments, *IEEE International Symposium on Multi-Robot and Multi-Agent Systems*, 2017.

#### **Computer Skills**

MATLAB/Simulink, Python, C++, Arduino, Standard ML, Prolog, Assembly (PIC24)

#### **Honors**

- Cedar Creek Ecosystem Science Reserve Fellowship (2018)
- UMN Graduate School Fellowship (2017)
- Sabancı University Scholarship (2012-16)

# **Teaching Experience**

CSCI 1133 - Introduction to Computing and Programming Concepts (Spring 2017, Fall 2017): GitHub organization setup for the class, preparing assignments, grading/auto-grading and interviewing students