# 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

Samsung Research Artificial Intelligence Center Research Intern

New York City, NY Jan 2019 - Aug 2019

- Single and multi-view 3D reconstruction, learning object representations, object part decomposition from images, velocity controller for visual servoing of a manipulator robot
- Robotic Sensor Networks Lab
  Graduate Student

Minneapolis, MN Sept 2016 - present

- Approximation algorithms and online strategies for network formation of a multi-robot system
- 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

- Developed an action planner to rearrange cluttered objects so as to grasp an initially unreachable object
- Joint Institute of Engineering, SYSU-CMU
  Undergraduate Research Intern

Guangdong, China
June 2015 - Sept 2015

- Worked on parameter identification and state of charge estimation of deteriorated batteries
- $\bullet$  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, Active Localization of Multiple Targets Using Noisy Relative Measurements, Workshop on the Algorithmic Foundations of Robotics (WAFR), 2020.

- 2. S. Engin, E. Mitchell, D. Lee, V. Isler, D. D. Lee, Higher Order Function Networks for View Planning and Multi-View Reconstruction, *International Conference on Robotics and Automation (ICRA)*, 2020.
- 3. E. Mitchell, S. Engin, V. Isler, D. D. Lee, Higher Order Function Networks for Learning Composable 3D Object Representations, *International Conference on Learning Representations* (ICLR), 2020.
- 4. S. Engin, V. Isler, Asynchronous Network Formation in Unknown and Unbounded Environments, *International Conference on Robotics and Automation (ICRA)*, 2019.
- 5. S. Engin, V. Isler, Minimizing Movement to Establish the Connectivity of Randomly Deployed Robots, *International Conference on Automated Planning and Scheduling (ICAPS)*, 2018.
- 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 (MRS), 2017.

#### **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

### **Professional Services**

Reviewer for IROS (2017-2020), ICRA (2018-2020), NeurIPS (2019), ICLR (2020), WAFR (2020)

## Recent Talks

- Aerospace Engineering and Mechanics Research Seminar, Minneapolis, MN, April 2020
- CS Graduate Research and Discussion Seminars, Minneapolis, MN, March 2020
- Samsung Vision Workshop, Seoul, Korea, November 2019
- Samsung AI Center Research Seminar, New York City, NY, November 2018
- UMN Visual Computing & AI Seminar, Minneapolis, MN, November 2018

## **Technical Skills**

Python, C++, PyTorch, Matlab/Simulink