Kazim Selim Engin
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September 29, 2020

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Education

- **University of Minnesota** — Minneapolis, MN
  Ph.D. Student in Computer Science and Engineering — *Sept 2016 - present*
  Advisor: Prof. Volkan Isler

- **Sabancı University** — Istanbul, Turkey
  B.S. in Mechatronics Engineering, with high honors — *Sept 2012 - June 2016*

Research Experience

- Samsung Research Artificial Intelligence Center — New York City, NY
  Research Intern — *Jan 2019 - Aug 2019*
  - Single and multi-view 3D reconstruction; learning manipulable object representations; object part decomposition from images
  - Velocity controller implementation for visual servoing with a manipulator robot

- Robotic Sensor Networks Lab — Minneapolis, MN
  Graduate Student — *Sept 2016 - present*
  - Approximation algorithms and online strategies for network formation of a multi-robot system
  - Localization of targets using multiple UAVs equipped with bearing-only sensors
  - Self-supervised learning methods for novel view synthesis and 3D reconstruction

- Knowledge Representation and Reasoning Group — Istanbul, Turkey
  Undergraduate Researcher — *Sept 2015 - June 2016*
  - Action planner implementation for rearrangement of a cluttered scene and grasping the objects

- Joint Institute of Engineering, SYSU-CMU — Guangdong, China
  Undergraduate Research Intern — *June 2015 - Sept 2015*
  - System identification and state of charge estimation of deteriorated Lithium-ion batteries

- Automation and Information Systems, Technical University of Munich — Munich, Germany
  Undergraduate Research Intern — *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, Establishing Fault-Tolerant Connectivity of Mobile Robot Networks, *IEEE Transactions on Control of Network Systems (TCNS)*, 2020 (under review).

2. N. Häni, **S. Engin**, J-J. Chao, V. Isler, Unsupervised Continuous Object Representation Networks for Novel View Synthesis, *Conference on Neural Information Processing Systems (NeurIPS)*, 2020.

3. **S. Engin**, V. Isler, Active Localization of Multiple Targets Using Noisy Relative Measurements, *Workshop on the Algorithmic Foundations of Robotics (WAFR)*, 2020.

4. **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.

5. 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.

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

7. **S. Engin**, V. Isler, Minimizing Movement to Establish the Connectivity of Randomly Deployed Robots, *International Conference on Automated Planning and Scheduling (ICAPS)*, 2018.

8. 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)
- University of Minnesota CSE 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 (2017-20), ICRA (2018-20), NeurIPS (2019-20), ICLR (2020-21), 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