Kaan KARAMAN

E-mail: kaankaramanofficial@gmail.com Personal Page / Scholar / Linkedin / Twitter

Master of Science 2017 - 2021 **EDUCATION** Middle East Technical University, Ankara, Turkey Electrical and Electronics Engineering Department Specialized in Signal Processing CGPA: 3.79 / 4.00 Thesis: Deep Metric Learning with Distance Sensitive Entangled Triplet Losses Advisor: Prof. Dr. A. Aydin Alatan Bachelor of Science 2012 - 2017 Middle East Technical University, Ankara, Turkey Electrical and Electronics Engineering Department Specialized in Bio-medical Engineering and Imaging CGPA: 3.81 / 4.00 (Ranked 9^{th} among 375 senior level students) Double Major 2013 - 2017 Middle East Technical University, Ankara, Turkey Physics Department Specialized in Mathematical Physics and Relativity CGPA: 3.67 / 4.00 **Preparatory School** 2011 - 2012 Middle East Technical University, Ankara, Turkey **High School** 2007 - 2011 Adem Tolunay Anatolian High School, Ankara, Turkey Specialized in Mathematics and Science CGPA: 86.61 / 100.00

HONORS

Dean's High Honor List (×8)

Semester GPA > 3.5/4.0

Dean's Honor List $(\times 1)$

3.0/4.0 < Semester GPA < 3.5/4.0

IEEE Signal Processing Society Travel Grant

In 26th IEEE International Conference on Image Processing (ICIP), 2019

Graduate Scholarship

The Scientific and Technological Research Council of Turkey (TUBITAK)

PUBLICATIONS

Karaman, K., & Alatan, A. A. (2021, September). Metu loss: metric learning with entangled triplet unified loss. In 28th IEEE International Conference on Image Processing (ICIP). IEEE. (submitted)

Akkaya I. B., & Karaman, K. (2020, May). A robust technique for real-time face verification with a generative network. In Real-Time Image Processing and Deep Learning (Vol. 11401, p. 1140107). International Society for Optics and Photonics (SPIE).

Karaman, K., Akkaya I. B., Solmaz B., & Alatan A. A. (2020, October). A face recognition technique by representative learning with the quadruplets. In 28th Signal Processing and Communications Applications Conference (SIU). IEEE.

Karaman, K., Akkaya I. B., & Alatan A. A. (2020, October). Metric learning with quadruplets on non-hierarchical labeled datasets. In 28th Signal Processing and Communications Applications Conference (SIU). IEEE.

Karaman, K., Gundogdu, E., Koc, A., & Alatan, A. A. (2019, September). Quadruplet selection methods for deep embedding learning. In 26th IEEE International Conference on Image Processing (ICIP). IEEE.

Karaman, K., & Akkaya I. B. (2019, October). Semi-supervised adversarial training of a lightweight neural network for visual recognition. In Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies II (Vol. 11166, p. 111660O). International Society for Optics and Photonics (SPIE).

Solmaz, B., & Karaman, K. (2019, April). Modeling human activities via long short term memory networks. In 27th Signal Processing and Communications Applications Conference (SIU). IEEE.

Karaman, K., Koc, A., & Alatan, A. A. (2018, October). Face recognition based on embedding learning. In Counterterrorism, Crime Fighting, Forensics, and Surveillance Technologies II (Vol. 10802, p. 108020J). International Society for Optics and Photonics (SPIE).

Karaman, K., Gundogdu, E., Koc, A., & Alatan, A. A. (2018, May). A method for quadruplet sample selection in deep feature learning. In 26th Signal Processing and Communications Applications Conference (SIU). IEEE.

Solmaz, B., Gundogdu, E., **Karaman, K.**, Yucesoy, V., & Koc, A. (2017, October). Fine-grained visual marine vessel classification for coastal surveillance and defense applications. In Electro-Optical Remote Sensing XI (Vol. 10434, p. 104340A). International Society for Optics and Photonics (SPIE).

WORK EXPERIENCE

Research Engineer ASELSAN Research Center July 2017 - Present

Internship Anketek August 2016 - September 2016

Internship ASELSAN June 2015 - July 2015

EXTRA-CURRICULAR ACTIVITIES

METU Information Office for Newcomers

2013-2017

Volunteer

CERN, a 2-day technical tour

August 2013

Accompanied by Prof. Dr. Bilge Demirkoz

METU Gastronomy Society

2013-2014

Founder Member

Organized Society Events

METU Debate Society

2011-2013

Quarter-finalist of Bogazici University Debate Tournament (January 2011)

Organized Society Events

LANGUAGE

Turkish: Native English: Advanced

SKILLS

Operating Systems

Ubuntu, Windows.

Package Programs

Microsoft Office Programs, LATEX, PyCharm, LTspice, Key Creator, Agilent VEE, Lab-

VIEW, Xilinx VIVADO, Altera QUARTUS.

Programming Languages

Python, MATLAB, C++, Verilog.

Libraries in Python

PyTorch, OpenCV, Numpy, Matplotlib, Scikit-Learn.

REFERENCES

Available upon request