

Oğuzhan Fatih Kar

PERSONAL DETAILS

<i>Mail</i>	oguzhan.kar@epfl.ch
<i>Website</i>	https://ofkar.github.io/
<i>Interests</i>	Computer vision, machine learning, computational imaging, inverse problems, optimization

EDUCATION

Ph.D. in Computer Science <i>Swiss Federal Institute of Technology (EPFL), Lausanne, Switzerland</i> <i>Advisor: Amir Zamir</i>	2019-Present
M.S. in Electrical and Electronics Engineering (CGPA: 3.93/4.00) <i>Middle East Technical University (METU), Ankara, Turkey</i> <i>Advisor: Figen S. Oktem</i> <i>Thesis: Computational spectral imaging techniques using diffractive lenses and compressive sensing</i>	2017-2019
B.S. in Electrical and Electronics Engineering (CGPA: 3.90/4.00) <i>Middle East Technical University (METU), Ankara, Turkey</i>	2013-2017

WORK EXPERIENCE

Research Engineer <i>ASELSAN Research Center, Ankara, Turkey</i> <ul style="list-style-type: none">Developed and implemented novel reconstruction techniques for computational imaging.Built optical setups for computational imaging.	2017-2019
Research Intern <i>ASELSAN Research Center, Ankara, Turkey</i> <ul style="list-style-type: none">Developed and implemented non-uniformity correction algorithms for infrared imaging.	2016
Research Intern <i>TUBITAK SAGE, Ankara, Turkey</i> <ul style="list-style-type: none">Implemented communication protocols between FPGA and ADC.	2015

SKILLS

<i>Languages</i>	Turkish (mother tongue) English (very fluent, TOEFL score: 106/120) French (beginner) German (beginner)
<i>Computer</i>	Python, PyTorch, MATLAB, C, C++, LaTeX, Linux, Bash, Javascript

AWARDS AND HONORS

TUBITAK (Scientific and Technical Research Council of Turkey): Full scholarship for M.S. studies

IEEE: Travel award for ICIP 2018

METU EEE Department: Dr. Bulent Kerim Altay award for 4.0/4.0 GPA in Fall 2015 semester

METU EEE Department: Best Poster Presentation award in GRAD STAR 2018 Departmental Poster Competition

METU EEE Department: Graduate courses performance award 2019

8 times listed in Dean's High Honor Roll, Middle East Technical University, 2013-2017

Ranked 228th in National University Entrance Exam 1st stage among 2 million students

Ranked 159th in National University Entrance Exam 2nd stage among 2 million students

PUBLICATIONS

Conference Publications

1. A. Zamir*, A. Sax*, T. Yeo, **O. F. Kar**, N. Cheerla, R. Suri, Z. Cao, J. Malik, L. Guibas, "Robust learning through cross-task consistency." Arxiv. 2020. (**Also in CVPR 2020 as oral presentation**)

2. **O. F. Kar**, A. Gungor, H. E. Guven, "Real-time compressive video reconstruction for spatial multiplexing cameras." IEEE Global Conference on Signal and Information Processing (GLOBALSIP). 2019. (**Oral presentation**)

3. **O. F. Kar**, A. Gungor, H. E. Guven, "Learning based regularization for spatial multiplexing cameras." IEEE Global Conference on Signal and Information Processing (GLOBALSIP). 2019. (**Poster presentation**)

4. A. Gungor*, **O. F. Kar***, "A transform learning based deconvolution technique with super-resolution and microscanning applications." IEEE International Conference on Image Processing (ICIP). 2019. (**Poster presentation**)

5. **O. F. Kar**, F. S. Oktem, "Fast computational spectral imaging using photon sieves." OSA Imaging and Applied Optics Congress. 2019. (**Oral presentation**)

6. **O. F. Kar**, A. Gungor, H. E. Guven, "Optimal number of measurement analysis for coded compressive focal plane array imager." IEEE Signal Processing and Communications Applications Conference (SIU). 2019. (**Oral presentation**) (**National conference**)

7. **O. F. Kar**, A. Gungor, H. E. Guven, "Compressive focal plane array imager reconstruction using learning based regularization." IEEE Signal Processing and Communications Applications Conference (SIU). 2019. (**Oral presentation**) (**National conference**)

8. **O. F. Kar**, A. Gungor, S. Ilbey, C. B. Top, H. E. Guven, "A performance analysis on the optimal number of measurements for coded compressive imaging." IEEE Global Conference on Signal and Information Processing (GLOBALSIP). 2018. (**Oral presentation**)

9. A. Gungor, **O. F. Kar**, H. E. Guven, "A matrix-free reconstruction method for compressive focal plane array imaging." IEEE International Conference on Image Processing (ICIP). 2018. (**Poster presentation**)

10. **O. F. Kar**, U. Kamaci, F. C. Akyon, F. S. Oktem, "Compressive photon-sieve spectral imaging." OSA Imaging and Applied Optics Congress. 2018. (**Oral presentation**)

11. **O. F. Kar**, A. Gungor, S. Ilbey, H. E. Guven, "An efficient parallel algorithm for single-pixel and FPA imaging." SPIE Defense and Commercial Sensing Conference. 2018. (**Oral presentation**)

12. **O. F. Kar**, A. Gungor, H. E. Guven, "An adaptive relaxed alternating direction method of multipliers for compressive focal plane array imaging." IEEE Signal Processing and Communications Applications Conference (SIU). 2018. (**Oral presentation**) (**National conference**)

13. **O. F. Kar**, U. Kamaci, F. C. Akyon, F. S. Oktem, "Effect of different sparsity priors on

compressive photon-sieve spectral imaging.” IEEE Signal Processing and Communications Applications Conference (SIU). 2018. (**Oral presentation**) (**National conference**)

Journal Publications

1. O. F. Kar, F. S. Oktem, ”Compressive spectral imaging with diffractive lenses.” Optics Letters, vol. 44, no. 18, pp. 4582-4585, 2019.

2. O. F. Kar, F. S. Oktem, ”High-resolution computational spectral imaging with photon sieves.” In preparation.

ACADEMIC ACTIVITIES

Journal Reviewer: Optics Express, Applied Optics

Conference Reviewer: ECCV 2020, EUSIPCO 2019

Member: IEEE (2017-2018), SPIE (2017-2018).