Oğuzhan Fatih Kar

PERSONAL DETAILS

Mail	oguzhan.kar@metu.edu.tr
Website	https://ofkar.github.io/

EDUCATION

M.S. in Electrical and Electronics Engineering 2017-present

Middle East Technical University, Ankara, Turkey

Concentration in Signal Processing.
Advisor: Assist. Prof. Figen S. Oktem
Thesis: Compressed sensing optical imaging with application to compressive photon sieve spectral imager
CGPA: 3.93/4.00

B.S. in Electrical and Electronics Engineering 2013-2017

Middle East Technical University, Ankara, Turkey

Concentration in Signal Processing and Telecommunications. Graduated with High Honors.
CGPA: 3.90/4.00

WORK EXPERIENCE

Research Engineer 2017-present

ASELSAN Research Center, Ankara, Turkey

- Developed and implemented novel reconstruction techniques for compressive infrared imaging.
- Built optical setup for experimentally analyzing compressive infrared imaging.

Research Intern 2016

ASELSAN Research Center, Ankara, Turkey

- Developed and implemented non-uniformity correction algorithms for infrared imaging.

Research Intern 2015

TUBITAK SAGE, Ankara, Turkey

- Implemented communication protocols between FPGA and ADC.

SKILLS

Languages	Turkish (mother tongue) English (very fluent, TOEFL score: 106/120) French (beginner) German (beginner)
Computer	MATLAB, Python, TensorFlow, Caffe, C, C++, LabVIEW, LaTeX, Linux

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 Poster Competition
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. O. F. Kar, F. S. Oktem, "Fast computational spectral imaging using photon sieves." To appear in OSA Imaging and Applied Optics Congress. 2019. (**Oral presentation**)
2. O. F. Kar, A. Gungor, H. E. Guven, "Real-time compressive focal plane array imaging." To appear in OSA Imaging and Applied Optics Congress. 2019. (**Oral presentation**)
3. O. F. Kar, A. Gungor, H. E. Guven, "Optimal number of measurement analysis for coded compressive focal plane array imager." To appear in IEEE Signal Processing and Communications Applications Conference (SIU). 2019. (**Oral presentation**) (**National conference**)
4. O. F. Kar, A. Gungor, H. E. Guven, "Compressive focal plane array imager reconstruction using learning based regularization." To appear in IEEE Signal Processing and Communications Applications Conference (SIU). 2019. (**Oral presentation**) (**National conference**)
5. O. F. Kar, A. Gungor, H. E. Guven, "Learning based proximal operators for compressive focal plane array imaging." To appear in IEEE International Conference on Optimization and Applications (ICOA). 2019. (**Oral presentation**)
6. 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**)
7. A. Gungor, **O. F. Kar**, H. E. Guven, "A matrix-free reconstruction method for compressive focal plane array imaging." International Conference on Image Processing (ICIP). 2018. (**Poster presentation**)
8. 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**)
9. 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**)
10. O. F. Kar, A. Gungor, H. E. Guven, "An adaptive relaxed alternating direction method of multipliers for compressive focal plane array imaging." Signal Processing and Communications Applications Conference (SIU). 2018. (**Oral presentation**) (**National conference**)
11. O. F. Kar, U. Kamaci, F. C. Akyon, F. S. Oktem, "Effect of different sparsity priors on compressive photon-sieve spectral imaging." 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." Submitted to Optics Letters.

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

ACADEMIC ACTIVITIES

Reviewer: EUSIPCO 2019.
Member: IEEE (2017-present), SPIE (2017-2018).

REFERENCES

Available upon request.