

# Oğuzhan Fatih Kar

# PERSONAL DETAILS

Birth August 24, 1994

Mail oguzhan.kar@metu.edu.tr

*Mobile* +90 537 303 03 90

# **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

GPA: 3.90/4.00

#### **B.S.** in Electrical and Electronics Engineering

2013-2017

Middle East Technical University, Ankara, Turkey

 $Concentration\ in\ Signal\ Processing\ and\ Telecommunications\ areas.\ Graduated\ with\ High\ Honors.$ 

GPA: 3.90/4.00

## **WORK EXPERIENCE**

#### **Research Engineer**

2017-present

ASELSAN Research Center, Ankara, Turkey

- Developed 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 implement non-uniformity correction algorithms for infrared imaging.

### **Research Intern**

2015

TUBITAK SAGE, Ankara, Turkey

• Developed and implement communication protocols between FPGA and ADC.

## **SKILLS**

Languages Turkish (mother tongue)

English (fluent) German (beginner)

Software MATLAB, Python, TensorFlow, Caffe, C, C++, LabVIEW, Verilog, LaTeX

## **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**, 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.
- **2.** 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.
- **3. O. F. Kar**, U. Kamaci, F. C. Akyon, F. S. Oktem, "Compressive photon-sieve spectral imaging." OSA Imaging and Applied Optics Congress. 2018.
- **4. 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.
- **5. 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.
- **6. 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.

#### **Journal Publications**

- **1. O. F. Kar**, F. S. Oktem, "Compressive diffractive spectral imaging using photon-sieves." In preparation.
- **2. O. F. Kar**, F. S. Oktem, "Super-resolution in photon-sieve spectral imaging." In preparation.

## REFERENCES

### • Asst. Prof. Figen S. Oktem

Assistant Professor

Department of Electrical and Electronics Engineering, Middle East Technical University  $06800~\mathrm{Ankara}$ , Turkey

figeno@metu.edu.tr

+90 312 210 23 42

#### • Asst. Prof. Elif Vural

Department of Electrical and Electronics Engineering, Middle East Technical University 06800 Ankara, Turkey velif@metu.edu.tr

+90 312 210 23 70

## • Prof. Cagatay Candan

Department of Electrical and Electronics Engineering, Middle East Technical University 06800 Ankara, Turkey ccandan@metu.edu.tr +90 312 210 23 55

## • Prof. Ali Ozgur Yilmaz

Department of Electrical and Electronics Engineering, Middle East Technical University 06800 Ankara, Turkey aoyilmaz@metu.edu.tr +90 312 210 23 37