# Osman Furkan KAR

Curriculum Vitae

### PERSONAL DETAILS

Mail okar@ucsd.edu

osmanfurkankar@hotmail.com

Interests Graph Signal Processing, Machine Learning, Deep Learning

Website https://osmanfurkankar.com

# **EDUCATION**

### Ph.D. Electrical & Computer Engineering

2023-

University of California San Diego, California, US

Signal and Image Processing Research Area.

Ph.D. Student with ECE Department Fellowship

### MSc. Electrical & Electronics Engineering

2020-2023

Middle East Technical University, Ankara, Turkey

Signal Processing Field.

Thesis: Estimation Of Partially Observed Graph Signals By Learning Spectrally Matched Graph Dictionaries

Advisor: Assoc. Prof. Elif VURAL

### BSc. Electrical & Electronics Engineering

2016-2019

Middle East Technical University, Ankara, Turkey

Specialized in Telecommunications and Signal Processing Areas.

#### BSc. Mechanical Engineering

2014-2016

Bilkent University, Ankara, Turkey

Left as a Sophomore with 2nd Rank in the Department.

### WORK EXPERIENCE

### Expert Engineer & Radar Systems Architect

2023 - 2023

ASELSAN - REHIS, Ankara, Turkey

Responsible Expert Systems Engineer

#### Radar Systems Architect

2022 - 2022

ASELSAN - REHIS, Ankara, Turkey

Responsible Systems Engineer

#### Algorithm Design Engineer II

2021 - 2022

ASELSAN - REHIS, Ankara, Turkey

Radar Signal Processing, Radar Data Processing, Radar Systems Simulation Modelling

#### Algorithm Design Engineer

2019 - 2021

ASELSAN - REHIS, Ankara, Turkey

Radar Signal Processing, Radar Data Processing, Radar Systems Simulation Modelling

#### **Engineering Intern**

2018

TUBITAK UZAY, Ankara, Turkey

Developed Stereo Vision Depth Estimation Systems for Computer Vision Related Works

### Engineering Intern

2018

ASELSAN - REHIS, Ankara, Turkey

Implemented Supervised Learning Methods for Target Detection in Pulse-Doppler-Radar Systems.

Research Intern 2017

Optical Microsystems Laboratory, Koç University, Istanbul, Turkey

Developed Smart Glove and Typing Methods for Enhancing User Experience in Augmented Reality (AR) Applications

Research Intern 201

Optical Microsystems Laboratory, Koç University, Istanbul, Turkey

Developed a system that is able to construct 3D models of archaeological artifacts by using Reflectance Transformation Imaging (RTI)

## **RESEARCH**

- O.F. Kar, G. Turhan, E. Vural. "Learning Graph Signal Representations with Narrowband Spectral Kernels". IEEE International Workshop On Machine Learning For Signal Processing, 2022. (Accepted, Oral Presentation)
- O.F. Kar, G. Turhan, E. Vural. "Learning Narrowband Graph Spectral Kernels for Graph Signal Estimation". IEEE Signal Processing and Communications Applications Conference (SIU). 2022. (Accepted, Oral Presentation)
- V. P. Ghoushchi, A. Arslan, **O.F. Kar**, M. Yazıcı. "Reconstruction of 3D Images of Archaeological Objects Using RTI Dome Method". 18. National Optic, Electro-Optic and Photonics Workshop, Bilkent University. 2016.

### **ACCOMPLISHMENTS**

- University of California San Diego, Electrical & Computer Engineering **Ph.D. Fellowship**
- $\bullet$  ALES 2018-2 (National GRE)(30.09.2018) : Quantitative: 94.35/100, **Ranked: 309** in nationwide
- 2014 National University Entrance Exam: Ranked %0.1 among 2+ million students in both 2 Steps
- 2010 National High School Entrance Exam: Ranked %0.1 among 1+ million students in the end of three steps.
- 2008 National High School Entrance Exam: Ranked 1st among 1+ million students in the first step of three

### **SKILLS**

Languages Turkish (native)

English (fluent)

Software MATLAB, Simulink, C++, C, Python, PyTorch, Linux, Bash LATEX

### **INTERESTS**

Played FIFA at an advanced level, Play Billiards, Enjoy Acoustic Guitar Video Editing and Answering on Quora.