

EDUCATION

Delft University of Technology <i>PhD, Template Free Data Fusion for Single Molecule Localization Microscopy</i>	Delft, Netherlands 2018 – 2022 (Expected)
Norwegian University of Science and Technology <i>MSc in Applied Computer Science</i> Erasmus Mundus Joint Master Degree COSI: https://www.ntnu.edu/studies/macs-cosi	Gjovik, Norway 2016 – 2018
Middle East Technical University <i>BSc in Electrical and Electronics Engineering</i>	Ankara, Turkey 2012 – 2016

RESEARCH INTERESTS

Computer Vision
Optimization and Machine Learning
Super-resolution Microscopy
Neuroscience

PUBLICATIONS

S. Bolkar, *Soft Segmentation of Viral Labeled Neurons*, MSc Thesis, KU Leuven (Neuro-electronics Flanders) and Norwegian University of Science and Technology, 2018
S. Bolkar, C. Wang, F. Cheikh, S. Yildirim *Deep Smoke Removal From Minimally Invasive Surgery Videos*, in Proceedings of the IEEE International Conference on Image Processing (ICIP), 2018

HONORS & AWARDS

<i>Neuro-electronics Research Flanders MSc Thesis Scholarship</i>	Spring 2018
<i>EU Mundus Master Joint Degree Full Scholarship</i>	2016 - 2018
<i>Best Research Poster Award in METU Undergraduate Research Fair</i>	May 2015
<i>Erasmus Summer Internship Grant</i>	Summer 2014
<i>Scholarship of METU Alumni Association</i>	2014 - 2016
<i>Scholarship of Prime Ministry of Turkey</i>	2010 - 2015
<i>Ranked at the top 0.5% in National University Entrance Examination</i>	2010

EXPERIENCE

Neuro-electronics Research Flanders, KU Leuven & IMEC <i>MSc Thesis Researcher</i> Soft Segmentation of Viral Labeled Neurons. Ganglion cells have complex structures with transparent neurites, and dendritic arborization is crucial for identification. The project aims to separate and reconstruct occluded individual neurons from viral labelled confocal microscopy images Advisor: Karl Farrow	Leuven, Belgium January - July 2018
Gestalt-ReVision, KU Leuven <i>Visiting Scholar</i> Mid-level Image Memorability. The project seeks to understand memorability of images from perceptual grouping point of view by using deep neural networks Advisor: Johan Wagemans	Leuven, Belgium July - August 2017
Mikro-Tasarm Electronics Inc. <i>IC Engineering Intern</i> Digital Circuit Design. The project is mainly on developing FPGA prototypes of a digital oscilloscope and a tunable clock management circuit by using Verilog	Ankara, Turkey August - September 2015

KocSistem Inc.*Computer Networking Intern*

Ankara, Turkey

June - August 2015

Network Design. The project aims to design and simulate network architecture of a company with multiple branches on hardware and software

Technical University of Denmark*Neuroengineering Intern*

Lyngby, Denmark

June - September 2014

Neurorehabilitation. It is a summer research project that targets development of feature extraction algorithms from EEG signals to be used in a brain computer interface for rehabilitation of ADHD

Advisor: Sadasivan Puthusserypady

SKILLS

Language: Turkish (Native), English (IELTS-7.5/9), Bokmal (Elem.)

Programming: Matlab, Python, C/C++, R, Verilog, Assembly-68HC11, LaTeX

Libraries: Caffe, Keras, OpenCV, LIBSVM/LIBLINEAR, Scipy, Scikit-Learn, EEGLAB

Computer Programs: Blender, AutoCAD, Cadence Virtuoso, Agilent VEE, Altera Quartus, Xilinx ISE, LTspice, Office Suites, Adobe Photoshop and Illustrator