## **ALI DEMIR**

#### **Mechatronics Engineer**



## **EXPERIENCE**

#### **ADAS Development Leader**

#### **TOFAS (Fiat - Chrysler Automobiles)**

Dec 2018 - Present

Bursa, Turkey

#### Computer Vision Consultant (Contractor)

#### **KocSistem**

## Aug 2018 - Dec 2018

ITEA: INSIST (Integrated Service Delivery for Citizens' Safety and Comfort) Project (for more info: https://itea3.org/project/insist.html)

- Face Detection and Recognition on SBCs
- Pedestrian Detection and Tracking
- Crowd Analysis
- Vehicle Detection and Traffic Analysis on SBCs

#### **ADAS Development Engineer**

#### **Progin Bilisim**

- TUBITAK 1507: Development of Computer Vision Aided Lane Departure Warning System (LDWS) for Semi Autonomous Vehicles.
- TUBITAK 1511: Development of Vehicle Platooning System with V2V Communication
- Development of Neural Network based E Horizon System for Commercial Vehicles

#### Algorithm Development Engineer

#### **GDS Muhendislik ARGE**

did Oct 2014 - Aug 2016

- TUBITAK 1507: Algorithm Side of Ship Main Engine Systems Simulation Project
- Ministry of Science, Industry and Technology: Development of Medical Training Equipment

#### **Project Intern**

#### **TOFAS (Fiat - Chrysler Automobiles)**

## Jun 2014 - Sept 2014

Bursa, Turkey

- Development of Production Quality Control System via Image Processing
- EU 7th FP Project: AUTORECON (https://cordis.europa.eu/project/rcn/101385\_en.html)

## **PUBLICATIONS**

- A. Demir and V. Sezer, "Intersection navigation under dynamic constraints using deep reinforcement learning," 2018 6th CEIT, IEEE, Istanbul, 2018.
- A. Demir and M. C. Macit, "Cooperative adaptive cruise control using visible light communication," 2017 25th SIU Conference, **IEEE**, Antalya, 2017, pp. 1-4.
- A. Demir, M. Erdem and V. Sezer, "Design and Experimental Validation of a Low Cost Autonomous Vehicle Testbed," AAT Conference, Istanbul, 2016, pp. 174 - 178.

## **EDUCATION**

# M.Sc. in Mechatronics Engineering, Istanbul Technical University

GPA: 3.50, Courses Done, Thesis In Progress: "Building Universal Controller Using Deep Reinforcement Learning"



# B.Sc. in Mechatronics Engineering, Okan University

GPA: 3.35

## **ACHIEVEMENTS**



#### Honors Degree (B.Sc.)

Ranked as 4th Most Successful in His Class.



# Student Representative in University Congress

Representative of Electrics and Electronics Engineering Department from 2010 to 2012

## **SKILLS**

English (YDS:86.25)

Deep Learning Machine Learning OpenCV Tensorflow ROS



Python Matlab

Simulink Linux C / C++

LabView Arduino/RaspberryPi etc.



### INTERESTS

Al and Robotics | Autonomous Vehicles

ADAS Deep Learning

Deep Reinforcement Learning

**Computer Vision**