



# Ali Demir

## Mechatronics Engineer



28 June 1991



Pendik/Istanbul



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## Skills

English (YDS: 86.25)

Matlab - Simulink

OpenCV

TensorFlow

ROS

Python

Machine Learning & Deep Learning

Linux

LabView

Arduino

Embedded C

C

(\*)[The skill scale is from 0 (Fundamental Awareness) to 6 (Expert).]

References available upon request.

## summary

He is currently working on different ADAS projects. He is very curious about SOTA deep learning techniques and their applications on different areas, and mostly knows about CNN (convolutional neural network) architectures (in the domain of classification and object detection) and Deep RL (Reinforcement Learning) algorithms. He also knows about main problems can be met during training this networks and SOTA solutions for this problems. He is open to offers from different areas and very eager to learn new things.

## education

Since 2015 **M.Sc. Student in Mechatronics Engineering** Istanbul Technical University  
Current GPA: 3.50/4.00, Courses Completed  
Thesis in progress and it is focused on Deep Reinforcement Learning

2009 - 2014 **B.Sc. in Mechatronics Engineering** Okan University  
GPA: 3.35/4.00, Honors Degree  
Ranked as 4th Most Successful in his class  
Student Representative of Electrics and Electronics Department in University Congress from 2010 to 2012

2012 - 2013 **B.Sc. in Mechatronics Engineering** Opole University of Technology  
GPA: 3.96/4.00  
As an Exchange Student with Erasmus Program

## publications

- 2018 "Intersection navigation under dynamic constraints using deep reinforcement learning", in **2018 6th International Conference on Control Engineering Information Technology (CEIT), IEEE, 2018**
- 2017 "Cooperative adaptive cruise control using visible light communication", **IEEE Signal Processing and Communications Applications Conference, 2017**
- 2016 "Design and experimental validation of a low cost autonomous vehicle testbed", **AAT Conference, 2016**

## experience

08/2018 - **KocSistem - Computer Vision Consultant** Istanbul  
ITEA: INSIST (Integrated service delivery for citizens' safety and comfort)  

- Smart Cities, Intelligent Transportation, Public Safety
- <https://itea3.org/project/insist.html>

ITEA: MOS2S (Media Orchestration - Sensor to Screen)  

- Smart City Technologies
- <https://itea3.org/project/mos2s.html>

2016 - 2018 **Progin Bilisim - ADAS Development Engineer** Istanbul  
TUBITAK - 1507: Development of **Computer Vision Aided Lane Departure Warning System (LDWS)** for Semi Autonomous Vehicles. (Completed)  
TUBITAK - 1511: Development of **Vehicle Platooning System with V2V Communication** (Completed)  
Development of **Neural Network based E - Horizon System** for Commercial Vehicles

2014 - 2016 **GDS Muhendislik ARGE - Algorithm Development Engineer** Istanbul  
TUBITAK - 1507: Algorithm Side of Ship Main Engine Systems Simulation Project  
Ministry of Science, Industry and Technology: Development of Medical Training Equipment

2014 **TOFAS (Fiat - Chrysler Automobiles)** Bursa  
Development of Production Quality Control System via Image Processing  
EU 7th FP Project: AUTORECON (<http://www.autorecon.eu/>)