

# ALI DEMIR

## Mechatronics Engineer

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## EXPERIENCE

### TOFAS (Fiat - Chrysler Automobiles (FCA)) / ADAS Development Leader

Dec 2018 – Present Bursa, Turkey

- Forward Looking Camera (FLC) Component Responsible
- Automatic Emergency Brake (AEB) Function Integrator
- Development and Standardization of Autonomous and ADAS Features
- Building New Collaborations with Startups and Universities
- Advanced Projects and Papers Responsible

### KocSistem / Computer Vision Consultant (Contractor)

Aug 2018 – Dec 2018 Istanbul, Turkey

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

### Progin Bilisim / ADAS Development Engineer

Sept 2016 – Aug 2018 Istanbul, Turkey

- 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

### GDS Muhendislik ARGE / Algorithm Development Engineer

Oct 2014 – Aug 2016 Istanbul, Turkey

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

## PUBLICATIONS (3 OF 6)

- A. Demir and V. Sezer, "Motion Planning and Control with Randomized Payloads on Real Robot Using Deep Reinforcement Learning," 2019 International Journal of Semantic Computing, vol.13 issue 4, pp. 541-563.
- A. Demir and V. Sezer, "Motion Planning and Control with Randomized Payloads Using Deep Reinforcement Learning," 2019 Third IEEE International Conference on Robotic Computing (IRC), Naples, Italy, 2019, pp. 32-37. (Selected for Journal)
- A. Demir and V. Sezer, "Intersection navigation under dynamic constraints using deep reinforcement learning," 2018 6th CEIT, IEEE, Istanbul, 2018.

<https://scholar.google.com/citations?user=iLOpWa4AAAAJ&hl=en>

## EDUCATION



M.Sc. in Mechatronics Engineering,  
Istanbul Technical University  
GPA: 3.50, Thesis : "Motion Planning and Control with Randomized Payloads 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.



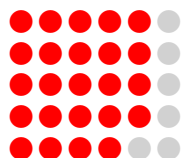
Student Representative in University Congress  
Representative of Electrics and Electronics Engineering Department from 2010 to 2012

## SKILLS

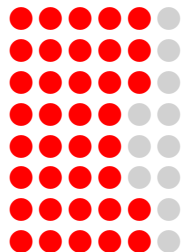
English (YDS:86.25)



Deep Learning  
Machine Learning  
OpenCV  
Tensorflow  
ROS



Python  
Matlab  
Simulink  
Linux  
C / C++  
LabView  
Arduino/RaspberryPi etc.  
Polarion



## INTERESTS

AI and Robotics    Autonomous Vehicles  
ADAS    Deep Learning  
Deep Reinforcement Learning  
Computer Vision