ALI DEMIR

Mechatronics Engineer

https://alidemir1.github.io/ +90 533 526 27 29
https://tr.linkedin.com/in/alidmr/ a.dmr45@gmail.com

EXPERIENCE

TOFAS (Fiat - Chrysler Automobiles) / ADAS Development Leader

Dec 2018 – Present Bursa, Turkey

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

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 (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=iL0pWa4AAAAJ&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.

INTERESTS

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