ALI DEMIR

Mechatronics Engineer

📞 +90 533 526 27 29   ✉ a.dmr45@gmail.com
in https://tr.linkedin.com/in/alidmr/

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 of **Autonomous and ADAS Features** (e.g. Autonomous Valet Parking)
- Standardization Responsible for FLC and Autonomous 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=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

✸ **Udacity Sensor Fusion NanoDegree**

ACHIEVEMENTS

🏛 **Honors Degree (B.Sc.)**
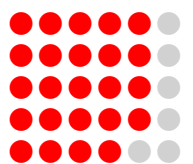Ranked as 4th Most Successful in His Class.

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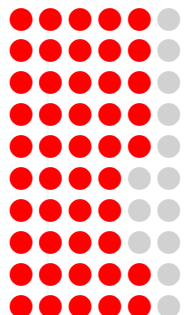
SKILLS

English (YDS:86.25) ●●●●●○

Deep Learning ●●●●●○
Machine Learning ●●●●●○
OpenCV ●●●●●○
Tensorflow ●●●●○○
ROS ●●●●○○

Python ●●●●●○
Matlab ●●●●●○
CAN Net. Manipulation ●●●●○○
CANalyzer ●●●●○○
Simulink ●●●●○○
Linux ●●●○○○
C / C++ ●●●○○○
LabView ●●●○○○
Arduino/RaspberryPi etc. ●●●●○○
Polarion ●●●●○○

INTERESTS

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