# **Bulent Siyah**

Istanbul, Turkey

Email: info@bulentsiyah.com Linkedin.com/in/bulentsiyah Kaggle.com/bulentsiyah

# Software Engineer (Computer Vision | Deep Learning)

I am working on Deep Learning and Computer Vision in Flying Automobile Project. In collaboration with SoftTech Software Technologies (https://softtech.com.tr/) and Aircar Corp. (http://www.aircarcorp.com/), electric powered vertical takeoff and landing (eVTOL) aircraft is being developed.

The projects I am working on are projects such as Semantic segmentation (Aerial images), which is used to find suitable areas where the vehicle can land during flight and to make volumetric control of these areas and positioning on the image to be activated GPS loss or Passenger mood analysis

You can access my work in all areas on my website (www.bulentsiyah.com). In addition to my website, you can review the source codes of all my works from my Kaggle, Github and Gist profiles.

#eVtol #FlyingCar #ComputerVision #DeepLearning

### **Experience**

**Computer Vision Engineer** — SoftTech Software Tech. Inc - Aircar Corp. , *Istanbul/Turkey* 

10/2019 - Present

The projects I am working on are Semantic segmentation (Aerial images) during the flight of the vehicle to find suitable areas where the vehicle can land. To make volumetric control of the vehicle to these areas. Other projects, such as positioning on the image that will be activated at the time of GPS loss and Passenger mood analysis.

Deep Learning Research Engineer – SoftTech Software Tech. Inc., Istanbul/Turkey

10/2018 - 10/2019

I work as a "Deep Learning Engineer" at SoftTech Software Technologies. My work is in the field of medical image processing and video processing. I had a long research opportunity on using CNN most effectively in medical images. My last study in this area is to determine the age from the left-handed X-Ray image.

**Software Engineer in Deep Learning –** Geobilgi IT Technologies, Istanbul/Turkey

03/2017 - 07/2018

I had the chance to develop deep learning first project in this company. The project was about classifying traffic signs. Then we developed projects such as license plate recognition and finding faces in the picture.

Mobile Application Developer – Geobilgi IT Technologies, Istanbul/Turkey

06/2015 - 03/2017

I developed IOS and Android applications through the company's current technologies and developing boutique software.

Mobile Application Developer – Rota Internet Technology Services, Istanbul/Turkey

07/2012 - 06/2015

I worked as a "Mobile Application Developer" at Rota Internet Technology Services. As a vehicle tracking company, I developed applications in the field of Android Devices Tracking and Geographic Information Systems.

# **Education**

Mustafa Kemal University, Turkey – Computer Engineering

2008 - 2012

I graduated from Mustafa Kemal University Computer Engineering Department in 2012 (3.06 / 4). I had been studied at Iskenderun Campus of Mustafa Kemal University. The Faculty of Engineering was connected to the newly established Iskenderun Technical University in 2015.

# Skills

Deep Learning, Deep Neural Networks (DNN), Convolutional Neural Networks (CNN), Recurrent Neural Networks (RNN), Long Short-term Memory (LSTM), Image Classification, Object Detection, Image Segmentation,

Machine Learning, Reinforcement Learning, Genetic Algorithms, Android Developer, IOS Developer, Python, Java, C#, Linux, Kaggle, Keras, TensorFlow, Optical Flow, Kalman Filters, Scikit-Learn, PyTorch, Autonomous Vehicles, Robot Localization, NumPy, Object-Oriented Programming (OOP), U-Net, YoloV3, Pose Estimation, Siamese Network

# <u>Projects</u>

### **Machine Learning Projects**

- Throughout the flight, calculating the distance of objects, collision detection and avoidance
- GPS Location Calculation with Aerial Camera Images
- Automatically Finding an AirCar's suitable Landing place Using Deep Learning
- Prediction Bone Age from X-Ray Image (Python)
- Plant Disease Using Siamese Network
- Name of Container and License Plate Recognition via Deep Neural Networks (Yolov3)
- Object Detection, Heat Map, Pose Estimation, Human Action Recognition
- Classification of Chest X-Ray Images (14 diseases, and one for "No findings")
- Classification of Skin Lesions using CNN
- Green Restricted Vehicle Routing Problem Optimization (Genetic Algorithm, C #)
- Book Container Placement Problem with Genetic Algorithm (Genetic Algorithm, C #)
- Maximum Weighted Clique Problem with Genetic Algorithm (MWCP) (C#)
- Double Sided Assembly Line Balancing with Genetic Algorithm (C #)
- Point-to-Point Path and Route Planning Using Genetic Algorithm (C#)
- A Data Mining Application on Breast Cancer Data with Oracle Data Miner

#### **Mobile Projects**

- Machine Learning Apps for Android (Android)
- Machine Learning Applications for IOS (IOS)
- Android Application Development Training Program (I created it myself Android)
- Traffic Directorate Field Operations Application (Android)
- Mobile Disaster Management (Android)
- Aircraft Tracking System (Vfr Flying Aircraft) (Android)
- Mobile City Guide (Android And IOS)
- Motion Recognition Application with Gyroscope Sensor (Android)
- 2 Pulse Control and Positioning Application (Alzheimer etc. for the elderly and in need of care) (Android)
- Ship Information System Remote Control Application (IOS)
- Promoter Supervision And Data Transfer Mobile Applications (Android And IOS)

### Certifications

#### **Machine Learning**

- 3x Kaggle Expert (Kernel, Dataset and Discussion Expert)
- Computer Vision Nanodegree
- Artificial Intelligence with Python: Reinforcement Learning A to Z
- Applied Machine Learning For Healthcare
- Deep Learning Computer Vision™ CNN, OpenCV, YOLO, SSD & GANs
- Natural Language Processing A-Z ™: (NLP)
- Elements of AI The University of Helsinki The University of Helsinki
- Face and Object Recognition with Computer Vision | R-CNN, SSD, GANs
- Deep Learning and Python: Deep Learning from A to Z
- Machine Learning with Python A-Z ™

# **Mobile Machine Learning**

- Fundamentals of Core ML: Machine Learning for IOS
- Mobile Machine Learning for Android: TensorFlow & Python

#### Other

- Portfolio Management and Consultancy
- Certified Drone Pilot to Fly for Commercial Use

# <u>Language</u>

- Turkish (Native or Bilingual)
- English (Professional Working)