



## EDUCATION

### 2016-Present

#### **Bilkent University, Faculty of Engineering, Ankara, Turkey**

B.S. in Computer Science, degree anticipated June 2021; CGPA 3.48/4.00

#### **Projects:**

- **Semantic Editing of Images:** I am currently designing a new neural network model to edit images. My supervisor and I plan to release a new paper about the topic. Gained hands on experience about deep generative adversarial neural networks. All the models are trained in Bilkent server using 4 GPUs in parallel. The code is containerized with Docker, which I installed and configured in the Bilkent server. This work is the product of 'Introduction to Research in Computer Science' course.
- **Operating System Related Projects:** Implemented and compared different CPU scheduling algorithms in an environment where multiple threads can request CPU. To prevent race conditions mutex locks are used. Implemented a basic file system in which processes can add, delete, write, and read files. All projects are written in C and compiled/ran in a Linux environment (Ubuntu 18.04).
- **Simple Online Text Editor:** A socket programming project written in Java. Users can add, delete, and edit the content of a given txt file online. A new application layer protocol is implemented. Server and clients communicate using this protocol.
- **CSCareer:** Contributed to the coding of quiz solving and result viewing processes of a quiz-based hiring system for computer-science related departments. Designed a relational database with entity-relationship diagram. Used technologies are Apache, PHP, MySQL, HTML, JavaScript, and CSS.
- **Fiyuv ++ / A New Version of Defender Game:** Contributed to coding of fight scenes of final enemies in the new version of defender game by using Java / JavaFX. Designed and prepared essential UML diagrams like use case, class, and sequence. The project follows the guidelines of Object-Oriented Programming principles and design patterns. Git version control tool is used to increase collaboration.

## EXPERIENCE

### June-July 2020

#### **A2 Technology, Intern, Ankara**

- Implemented an under-vehicle inspection software by using OpenCV and C++. Main algorithms used are feature based image alignment with SURF and sliding windows search. Gained experience about computer vision techniques.

## ADDITIONAL PROJECTS

#### **Deep Learning Related:**

- Finished "Introduction to Deep Learning" course offered by Stanford University. Implemented all the projects such as YOLO object detection algorithm and residual neural networks.

## SKILLS AND ABILITIES

### **Computer:**

- |                   |         |                                      |
|-------------------|---------|--------------------------------------|
| • Python, PyTorch | • C     | • Linux (Ubuntu), VirtualBox         |
| • Docker          | • C++   | • TCP/IP, Wireshark network analyzer |
| • Git             | • Java  |                                      |
| • OpenCV          | • MySQL |                                      |

**Languages:** Turkish (native), English (professional working proficiency)

## OTHER INFORMATION

### **Achievements & Certificates**

- 2<sup>nd</sup> in IDEathon organized by The Institute for Future Research and Microsoft, 2020
- 25<sup>th</sup> in ICPC Turkish Programming Competition, 2019
- Bilkent University Comprehensive Scholarship Student, 2016
- 1318<sup>th</sup> in the University Placement Exam (LYS), 2016