**Fahri TÜREDİ**

Undergraduate Senior Student of Electrical and Electronics Engineering Department of Middle East Technical University

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Professional profile

I graduated from Ünye Anatolian High School with the first graduate degree in 2015. The same year, I started to my undergraduate level study at Electrical & Electronics Engineering Department of Middle East Technical University. I am currently 4th grade student in this department. As my profession option in Electrical & Electronics Engineering, I am proceeding at Power Electronics area. I also took some Control Systems and Data Structure courses from Control and Computer fields. I am currently working on a EE Star project on Coordination of Autonomous Electric Vehicles for Energy Efficient Driving.

Career Summary

**July 2019 – August 2019 ASELSAN Electronics Inc., Ankara/TURKEY**

**Student Intern**

*Outline*

During my summer internship, I aimed to learn the company aspects and experience the engineering environment of the company. I also had the opportunity to apply my theoretical and practical skills I acquired during my education career on a real life engineering problem to design and develop new technologies and machines.

*Key responsibilities*

* Took part in the development of a user interface design project.
* Utilized Microsoft Visual Studio Software environment to implement a Serial Data Transfer process.
* Implemented a two way Serial Data Communication between a PC and microcontroller device.
* Applied check-sum error detection (checking) method on message datas to be transmitted to the receiver end from the sender end.
* Implemented stop-and-wait acknowledgement technique to achieve a reliable data transmission between the two end devices
* Made contribution to the debugging process of the C++ code written in the Microsoft Visual Studio side and the C code written in the Code Composer side to make sure that the program achieves a healthy two way communication between the two end devices.
* Applied parsing and composing/decomposing techniques on the data to be transmitted between the both end devices.

**August 2018 – September 2018 FNSS Defence Industry Inc., Ankara/TURKEY**

**Student Intern**

*Outline*

In my first internship experience, I tried to gain experience on the field of business life. I observed the company culture and ethics, and the relationship among the employees and with their seniors. I also had the chance to participate in the engineering process of the company. I learned by experiencing how to prepare a report of your work, and present it to a committee consisting of managers of the company.

*Key responsibilities*

* Worked on two separate projects. In the first project, designed and constructed a single pulse width modulation system for the triggering mechanism of the weapons.
* Designed the circuit that implements the single pulse width modulation process on the input pulse signal on the LTSpice simulation software environment.
* Utilized the KiCAD software program for the PCB drawing and CNC machine device for the PCB construction of the designed circuit.
* In the second project, worked on the Hardware In the Loop (HIL) simulation software for the testing and development of the real time control/embedded systems of a combat vehicle.
* Used HIL to test and analyze the Electronic Control Unit (ECU) of a combat vehicle.
* Utilized Vector CANoe comprehensive software program to create a simulation environment and interface for the testing of different scenarios related to the engine speed, lock status/position, ramp status/position and ignition status of the combat vehicle.

Education and qualifications

* **Bachelor, 4th year** Middle East Technical University 2015 – Present

Electrical & Electronics Engineering

C.GPA = 3.34

* **Graduate** Ünye Anatolian High School 2011 – 2015

Diploma Grade = 92.46

Conferences, Certificates and Awards

* Aegean Conference on Electrical Machines and Power Electronics (ACEMP)
* Optimization of Electrical & Electronics Equipment Conference (OPTIM)

IEEE Joint International Conference ACEMP – OPTIM 2019, İstanbul/TURKEY

Organization Team member

Interest Fields

* Electromechanical Energy Conversion and Power Electronics
* Electrical Machines
* Energy Efficiency of Automated and Connected Electric Vehicles
* Control Systems

Languages

* **Turkish**: Native Language
* **English**: Upper Intermediate Level

Projects and Researches

* EE213 Electrical Circuits Laboratory Term Project : **Solar Tracking System**
* EE214 Electrical Circuits Laboratory Term Project : **Wireless Fire Detection System**
* EE313 Analog Electronics Laboratory Term Project : **Design of an Optical Wireless Communication System: Photophone**
* EE314 Digital Electronics Laboratory Term Project : **Fake Quidditch Game Design using FPGA board**
* METU EE STAR : **Induction Machine Test Setup Development**
* METU EE STAR : **Coordination of Autonomous Electric Vehicles for Energy Efficient Driving**