VELAT TAŞKIRAN

Electrical & Electronics Engineer

velattaskiran@gmail.com +90 545 331 7882 velat-taşkiran-42b59210a
İşçi Blokları Mah., 1524. Sk., Dış Kapı No:17B, İç Kapı No:43, Çankaya, 06530 Ankara, Türkiye

WORK EXPERIENCE

ARKSIGNER A.Ş.

Embedded Software Engineer

April 2024 – Ongoing Ankara, Türkiye

- Android Embedded Systems
- Embedded System Design (Microcontroller)
- Embedded Software Design (C, Assembly)
- Test Algorithm Development (Python)
- Algorithm/Architecture Development

PRF ARGE A.Ş.

Embedded Design Engineer

March 2019 – April 2024 Ankara, Türkiye

- Embedded System Design (Microcontroller, FPGA, DSP)
- Embedded Software Design (C, Assembly, VHDL)
- Hardware-In-the-Loop Test System Design
- Test Algorithm Development (Python, MATLAB)
- Algorithm/Architecture Development
- Graphical User Interface Development (MATLAB, Android Studio)
- Analog, Digital, Mixed Signal Circuit Design (High Speed, FMC)
- PCB Design (Multilayer, HDI)

PRONOVA

Embedded Design Engineer

November 2018 – February 2019 Ankara, Türkiye

- Embedded System Design
- Embedded Software Design (Arduino, C)
- Graphical User Interface Development (Android Studio)

COMPLETED R&D PROJECTS

PROYTS - Hardware-In-the-Loop Test System

Jan 2022 – Aug 2023

Developed embedded software testing system based on Microchip, DSPIC33. Automatic test setups were established for each driver using Signal Generator and Oscilloscope. Automatic test codes were written using Python. Testing systems were used to evaluate and verify FMCW based RF proximity(YATS) by exchanging data using UART and SPI in different scenarios.

- Microcontroller based Embedded System Design
- Embedded Software Design (C Language)
- Algorithm/Architecture Development
- Test Algorithm Development (Python)

EDUCATION

BSc Electrical and Electronics Engineering

Hacettepe University | Ankara – Türkiye

September 2013 – February 2019

LANGUAGES

Turkish (Native)
English

COMPUTER SKILLS

Programming Languages:

C | Python | Matlab | Assembly | C++ | C# | Java

Hardware Description Languages:

VHDL

Computer Aided Engineering:

Microchip MPLAB X IDE & C Compilers | Visual Studio Code | MathWorks MATLAB/Simulink | Xilinx Vivado Design Suite System Edition | Xilinx ISE Design Suite System Edition | Texas Instruments Code Composer Studio | Linear Technology LTSpice IV | Altium Designer | Autodesk EAGLE | Object-Oriented Programming | Eclipse IDE | Android Studio | Git | GitHub | Arduino | SQL | PostgreSQL

R&D STUDIES

Embedded System Design | Embedded Software Development | Digital Circuit Design | Analog Circuit Design | Mixed Signal Circuit Design | PCB Design

PROT122 - Hardware-In-the-Loop Test System

Jan 2022 – Aug 2023

Developed embedded software testing system based on Microchip, DSPIC33. Automatic test setups were established for each driver using Signal Generator and Oscilloscope. Automatic test codes were written using Python. Testing systems were used to evaluate and verify FMCW based RF proximity sensor(FPT122) by exchanging data using UART and SPI in different scenarios.

- Microcontroller based Embedded System Design
- Embedded Software Design (C Language)
- Algorithm/Architecture Development
- Test Algorithm Development (Python)

FPT122-Fine Resolution Proximity Sensor

Aug 2021 – Dec 2021

Fully designed a 6-layer PCB for the digital board of the FPT122 with F28035(TI) and RS485 driver(LTC2850). Used oscilloscopes, spectrum analyzers, and signal generators to test and verify this PCB.

- Analog, Digital, Mixed Signal Circuit Design
- PCB Design (Multilayer, HDI)

EKS-Electronic Jamming System

Feb 2020 – Jul 2021

Developed a GUI to operate the 4-Channel Jamming System using Ethernet. All the communication libraries required for controlling EKS were created with OOP.

- Graphical User Interface Development (MATLAB)
- Test Algorithm Development (Python)

EKS-Electronic Jamming System

Feb 2020 – Jul 2021

Fully designed a 10-layer PCB from schematic to layout. This board contains DAC and ADC with JESD204B interface and VITA 57.1 FMC standards and SPI communication protocol. Used oscilloscopes, spectrum analyzers, and signal generators to test and verify this PCB.

- Analog, Digital, Mixed Signal Circuit Design (High Speed, FMC)
- PCB Design (Multilayer, HDI)

Tayfun - Telemetry Test System on Drone

Apr 2019 – Jan 2020

Developed a GUI for testing system which exchanges data with all FMCW based RF proximity sensors made by the company. This GUI was used to create various test scenarios for the sensors and to exchange data with the sensors using Ethernet.

- Graphical User Interface Development(MATLAB)
- Test Algorithm Development(Python, MATLAB)

Musical Instrument Project

Nov 2018 – Feb 2019

Developed embedded software based on Arduino. Developed an Android application for the control of the musical instrument.

- Embedded System Design
- Embedded Software Design(Arduino)
- Graphical User Interface Development (Android Studio)

SOFT SKILLS

Time management | Problem-solving | Teamwork | Leadership | Creativity | Critical Thinking

HOBBIES/INTERESTS

Playing Football | Analyzing Football | Camping | Movies/Series | Video Games

REFERENCES

Habib Özer Öz

Team Leader in PRF ARGE

@ habibozeroz@gmail.com
hoz@prfarge.com.tr

+90 541 605 7115

- Known for: 5 years
- He has been working on FPGA and Microprocessor based devices over 15 years.

Prof. Dr. Atila Yılmaz

Hacettepe University

@ ayilmaz@hacettepe.edu.tr

+90 312 297 7028

- Relationship : BSc | Academic Advisor
- Known for : 9 years

RFID Periodic Table Project

Nov 2018 – Feb 2019

Developed embedded software using I2C serial communication protocol based on Arduino.

- Embedded System Design
- Embedded Software Design(Arduino)