Muhammed Şamil Arınç

Electrical and Electronics Engineer

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EDUCATION

Bilkent University - Ankara, Turkey

Sep. 2018 - Jul. 2023

Senior Bachelor Student in Electrical and Electronics Engineering

Friedrich-Alexander-Universität - Erlangen, Germany

Apr. 2022 - Aug. 2022

Erasmus Student for Summer Semester

EXPERIENCE

Embedded Software Candidate Engineer - Akdogan Tech - Ankara, Turkey

Nov. 2022 - Current

Working on the design of communication protocols, working on custom Linux distributions, FPGA programming. Using C++, Python, Yocto.

Summer Training at Sensemore - Istanbul, Turkey

Jun. 2021 - Aug. 2021

Implemented communication protocol SMWiredPy which makes chip update easier, Optimized telemetry calculating algorithms, Used C++ and Python.

Laboratory and Teaching Assistant - Bilkent University

Sep. 2021 - Jan. 2022

Helped students on lab tasks and term projects for "Digital Design" course, Used VHDL and Vivado.

EXTRACURRICULAR ACTIVITIES

President of Bilkent Programming Club

Jul. 2021 - Apr. 2022

Coordinating activities and organizing lectures

Turtle Project Coordinator

Jul. 2021 - Mar. 2022

Formed and led a team to work on design and manufacture of autonomous car, worked on perception systems using PyTorch and YOLOv5.

Head of Technique at KFLMUN organization

Apr. 2017

Designed webpage and organized technical activities for Model United Nations organization.

PROJECTS

Smart Home System

Feb. 2023 - Current

Working on the Facial Recognition powered door lock, MQTT communication, database implementation. Using Raspberry Pi, Firebase, Python, TFLite.

Spoken Number Recognition

Designing an Analog Circuit and digital modules to take input from microphone and process it as a sampled digital signal. Using Artix-7 FPGA, VHDL, Vivado.

DL Framework (Project Link)

May. 2022 - Jan. 2023

Implemented a deep learning framework from scratch. C++, CUDA, Python used.

Music Genre Classification (Project Link)

Sep. 2021 - Jan. 2022

Implemented several Machine Learning and Deep Learning algorithms, used Python.

Charging Lane

Sep. 2021 - Jan. 2022

Designed a prototype road which has inductors placed under it. Provides charge to electric cars.

SMWiredPy (Project Link)

Jun. 2021 - Aug. 2021

Developed the SMCom UART communication protocol, binded its codes from C++ to Python.

Simple Elevator (Project Link)

Chameleon Robot (Project Link)

Feb. 2021 - Jun. 2021

Designed a basic elevator model with KL25-Z board and simple components.

Sep. 2020 - Dec. 2020

Created a robot moving with servo legs and changing its color according to floor.

TRC-10 Transceiver

Mar. 2020 - Jun. 2020

Implemented a simple transceiver circuit with many components.

LANGUAGES

Turkish (Native), English (Professional Working Proficiency), German (Beginner), Arabic (Beginner)

ACHIEVEMENTS AND CERTIFICATES

Bilkent University Comprehensive Scholarship

Sep. 2018 - Current

High Honour Student IELTS Score 7.0/9.0

Jan. 2020, Jun. 2020

Ranked 562 among 2 million students in National University Entrance Exam (YKS)

Feb. 2019

Jun. 2018

SKILLS

Extracurricular Courses Taken: Microprocessors, Machine Learning, Deep Learning, Robotics, Computer Networks Programming Skills: C, C++, Python, CUDA, VHDL, Assembly, MATLAB, PyTorch, Tensorflow

Developer Tools: Linux, VSCode, Vivado, Anaconda, Arduino, Git, Proteus, LTspice, Yocto, SolidWorks