Muhammed Şamil Arınç

Electrical and Electronics Engineer

Email: samil.arinc@ug.bilkent.edu.tr

Website: samilarinc.github.io

Phone: +90 536 212 4672 LinkedIn: samil-arinc GitHub: samilarinc

Bilkent University - Ankara, Turkey

Senior Bachelor Student in Electrical and Electronics Engineering

Friedrich-Alexander-Universität - Erlangen, Germany

Erasmus Student for Spring Semester

Apr. 2022 - Aug. 2022

Sep. 2018 - Jul. 2023

EXPERIENCE

EDUCATION

Embedded Software Candidate Engineer - Akdogan Tech - Ankara, Turkey

Nov. 2022 - Current

Working on Meteksan Ulaq AUSV project, designing socket and serial communication protocols, generating custom Linux distributions. Using C++, Python, Yocto.

Summer Training at Sensemore - Istanbul, Turkey

Jun. 2021 - Aug. 2021

 $\label{thm:condition} Developed \ the \ serial \ communication \ protocol \ SMCom, \ Optimized \ telemetry \ calculating \ algorithms.$

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

Coordinated club activities and organized lectures for students

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.

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

Feb. 2023 - Current

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 $\mathrm{C}++$ to Python.

Simple Elevator (Project Link)

Feb. 2021 - Jun. 2021

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

Chameleon Robot (Project Link)

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

Jan. 2020, Jun. 2020

IELTS Score 7.0/9.0

Feb. 2019

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

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