Okan Berhoğlu

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Experience

Teknopar Industrial Automation   Ankara, Turkey
Research and Development Engineer   February 2024 – Present
- Involved in research and development projects related to digital twin technologies and engaged in the process of data acquisition from CNC controllers besides from **OPC UA Server**.
- Integrated the **MTConnect** standard into data collection solution, which made the application faster.
- Worked with **InfluxDB** database.

Skills: **C#**

Candidate Research and Development Engineer   December 2022 – February 2024, 1 year 3 months
- Involved in research and development projects related to digital twin technologies and engaged in the process of data acquisition from CNC machines.
- Collaborated with a team on a project focused on the modeling of an electromechanical system in defense industry.

Skills: **Python**, **Matlab**

Research and Development Engineering Intern   May 2022 – December 2022, 8 months
- Participated in research and development projects that involve digital twin.

Skills: Matlab

Anova R&D Technologies   Ankara, Turkey
Mechanical Engineering Intern   May 2021 – August 2021, 4 months
- Worked in manufacturing process and contributed to process improvement in manufacturing.

Projects

Digital Twin Approach to Design and Development of a Gimbal
- Developed as a proof of concept of the digital twin paradigm.
- Worked with **ESP32** microcontroller, **BLDC Gimbal motors**, and **IMU sensor** within the project.
- Programmed the microcontroller to control the gimbal system and to be a **REST API** utilizing **Arduino IDE** and **C programming language**. Developed a web application within the project utilizing **React.js** and **Three.js**.

Laptop Stand Matlab App
- Developed a user-friendly Matlab app to enable every user to generate a 3D model in STL format of a laptop stand according to their preferred dimensions.
- Programmed a script for **3D topology optimization**, and its result is modeled by **Bezier surfaces** utilizing Matlab. For details: https://www.youtube.com/watch?v=4DD53ulCNdk

Portfolio Website
- Programmed by using **HTML**, **CSS**, and **JavaScript**. That contains my CV information. For details: https://okanberhoglu.github.io/PortfolioWebsite/

Information Sharing Website Backend
- Aim of the project is that people to publish articles about some topic to inform other people.
- Programmed utilizing **Java Spring Boot** and **MySQL database**.

Car Rental Website Backend
- Developed to enable people to rent a car from the website.
- Programmed utilizing **C#**, **.Net** and **SQL server**.

Education

TOBB Economics and Technology University   Ankara, Turkey
Bachelor of Science, Mechanical Engineering   2018 – 2023
Atatürk University   Remote
Associate degree, Computer Programming   2021 – 2023

Skills

Language: English (Intermediate), German (Elementary), Turkish (native)