

HALİL İBRAHİM DİREKTÖR
hidirektor@gmail.com • 90 (541) 741 03 09

Professional Experience

Onder Lift Celik Mak.

Research and Development Engineer

Manisa/Türkiye
April 2023 – Present

- Integrated an STM32F103RCT6-based custom-designed board into an IoT system. The IoT integration focused on enabling data transmission via WiFi while ensuring bidirectional data security.
- Developed server-side scripts using Node.js to handle requests from the electronic board based on STM32F103RCT6, establishing a connection to the database.
- Created a mobile application for end-users using Android and Swift in an IoT-based project. The app facilitates communication with the server-side script, allowing users and company employees to access and control the machine remotely.
- All data, including data of file types, is stored on a dedicated server using MongoDB and GridFS technologies to be managed in desired formats.

Lebara Mobile

Backend Developer – Mobile Developer

England/UK
January 2023 - June 2023

- Worked on optimizing applications designed with Java's Multithreading structure.
- Explored Version Control systems and version management.
- Conducted research on data transfer and data security using JDBC and MariaDB.
- Participated in server-side API development using REST API.
- Explored cloud library systems with Maven.

Onder Lift Celik Mak.

Intern Research and Development Engineer

Manisa/Türkiye
January 2023 - April 2023

- Conducted research and design studies on Autonomous Guided Vehicle (AGV) and Autonomous Mobile Robot (AMR).
- Developed simple AMR simulations using ROS and Python.
- Engaged in IoT projects using MQTT and STM32F103RCT6. Tested master-slave and broker techniques on designed server-client setups.

Technical Skills

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|-------------------------------------------------------------------------------------------------------------------|-----------|-------------------|-----------------|
| • C, C++, micro C, CSC C
(Ring Buffer for UART, json-c, MariaDB, lwIP, FreeRTOS, Zephyr) | • Fortran | • IntelliJ Idea | • WebStorm |
| • Java
(JavaFX, JDBC, Swing, OpenCV) | • SQL | • CLion | • Scene Builder |
| • Python
(OpenCV, PyAutoGui, Threading, Tkinter, Pandas, Seaborn, MatPlot, Scikit-learn, PyWhatkit, Openpypxl) | • TSQL | • STM32 Cube IDE | • Postman |
| • PHP (Laravel) | • MariaDB | • Github Desktop | • DataGrip |
| • JavaScript
(GridFS, MongoDB, Mongoose, Express) | • MongoDB | • Android Studio | • PyCharm |
| • Matlab | • MySQL | • MongoDB Compass | |

Education

Manisa Celal Bayar University
Bachelor of Mechatronics Engineering

Manisa/Türkiye
2019 - 2023

Projects and Thesis

TFEncryption

Türkiye
2021

- Developed a chat application TFEncryption using Cactoos, Concurrency and WebRTC technologies, enabling users to send encrypted files and text based on selected encryption methods (SPN, SHA256, MD5).
- Designed the interface by using JavaFX.

Teknofest International Unmanned Aerial Vehicle (İHA) Competititon

Avionics Responsible of Fixed-wing Category

Türkiye
2020

- Bore the responsibility of entire electronic and communication infrastructure of the designed aircraft by our Özkul İHA team.

Manisa Celal Bayar University

Manisa/Türkiye
2023

- Thesis Study on Industrial IoT Applications for PLC-Based Factories.