FURKAN PARLAK

Software Developer | Electrical Engineer

contact@furkanparlak.com   *   https://linkedin.com/in/furkanprlk   *

Personal Information

Date of Birth: 03.09.1998
Marital Status: Single
Driving License: 21/10/2020 (B)
Nationality: Republic of Turkey

Education

Duzce University

Bachelor of Science (BS) in Electrical Engineer, Türkiye, 2021, GPA: 2.92/4.0

Job Experience

Basarsoft Information Technology   Türkiye, 2023 April – Present

Software Developer Specialist

Involved in the technical development of personnel distribution optimization fort he Rotaban product. Responsible for developing enhancements in services such as routing, isochrones, TSP (Traveling Salesman Problem), VRP (Vehicle Routing Problem), and time-distance matrix on raw map data. Actively developing the front-end design of the RotabanV2 product using React.

Technical Skills: C, C++, C#, React, MS SQL, PostgreSql, React

MK Mekatronik Defence Technology   Türkiye, 2022 March – 2023 April

Research and Development Engineer

I've developed the Turret Stabilization Tester, Transmission Console Tester, Position transmitter for the Leopard 2A4 Tank at Türk Silahlı Kuvvetleri.

Technical Skills: EAGLE, Proteus, KiCAD, MPLAB, Keil uVision STM32 HAL Programming, PIC Programming, MPLAB, STM HAL, C, C++

Savendel Electronics Control Systems Türkiye, 2021 June – 2022 March

Research and Development Engineer

We made high speed flame detector, personal heater for FNSS and OTOKAR. I've made PCB Design, Embedded Software

Technical Skills: EAGLE, Proteus, MPLAB, Keil uVision, C, C++

Projects

2023 November – Present

Basarsolver, **Basarsoft Information Technology** – Optimization and Development

- Spearheaded the optimization and development of the company's core services, focusing on enhancements in Routing, Traveling Salesman Problem (TSP), Vehicle Routing Problem (VRP), and Isochrone analysis.

- Developed a specialized, time-detailed TSPTW solution for Yurtici Kargo to client requirements and enhancing logistical efficiency.

2023 November – Present

Rotaban, **Basarsoft Information Technology** – Rotaban V2

- Leading the development of RotabanV2 from the ground up, utilizing new technologies to effectively solve all pre-existing issues and enhance overall functionality.

- Pioneering the development of the frontend using Reacti, focusing on creating a responsive and user-friendly interface.

- Spearheading the implementation of a sustainable and cost-effective database solution with PostgreSQL, aimed at increasing efficiency and reliability.

2023 April – 2024 January

Rotaban, **Basarsoft Information Technology** – Optimization and Development

- Actively involved in the optimization and development of the Rotaban product, enhancing its performance and functionality.

2023 January – 2023 April

Leopard 2A4, **MK Mekatronik Defence Technology** – Location Transmitter Console

- Designed a processor architecture by integrating 6 distinct circuit boards, showcasing advanced skills in complex electronic design.

2022 April – 2023 April

Leopard 2A4, **MK Mekatronik Defence Technology** – Turret Stabilization Test Console

- Designed a processor architecture by integrating 14 distinct circuit boards, showcasing advanced skills in complex electronic design.

2022 April – 2023 March

Leopard 2A4, **MK Mekatronik Defence Technology** – Gear Test Console *(PCB Design)*

- Executed reverse engineering on a planned product for localization, successfully replicating a complex six-layer circuit board with precision.

2021 September – 2022 February

Flame Detector, **Savendel Electronics** – Flame Detector Sensor *(PCB Design)*

- Developed a flame detection system by comparing UV and IR Light wavelengths, enhancing accuracy and reliability in fire safety applications.

2020 June – 2020 September

Electric Vehicles, **Lodos Electromobile** – Li-Ion Charger 16S 10A 500W *(PCB Design)*

- Full Bridge Buck Converter Topology

2019 February – 2019 September

Electric Vehicles, **Lodos Electromobile** – Battery Management System *(Embedded and Software)*

- 16S 22P Li-Ion Battery Active Balancer, Over Load Protect, Isolated Power Supply Circuit, 16 4 Channel Temperature detection and protection.

2018 April – 2018 September

Electric Vehicles, **Lodos Electromobile** - *Vehicle Control System (Embedded and Software)*

- Linux Based QT Programming Vehicle Control Panel
- Control of external vehicle features such as lights, horn, and wipers through Atmega328P SPI communication.
- Support LORA / MQTT Communication

Awards & Competitions

TUBITAK Efficiency Challenge 2019 – Lodos Electromobile Team (Team Captain) – **11/93**

TUBITAK Efficiency Challenge 2020 – Lodos Electromobile Team (Team Captain) – **10/105**

Autodesk DesignNOW 2021 – Plant Irrigation System – **1/77**

Computer Technologies

C, C++ , C#, JavaScript, MS SQL, PostgreSQL, Bash Script,React, Photoshop,Python, MATLAB Simulink, PLC Ladder, ESP32, STM32(RTOS, Bare-Metal, HAL), ARM, Novuton, IoT, MQTT, Git, QT, Unity,MS Office,

Language Skills

English (Intermediate). Professional Proficiency.

Hobbies

Social Projects:
- **Google Developer Group** Organiser**, (** 2018 – 2021)
- **Duzce University Energy Community** Founding President, (2018 – 2021)
- **Robotic Coding Teacher** Volunteer, (2018 – 2021)

Interests: Programming, Sport(Swim, GYM, Hiking), Photoshop, Chess, Epoxy Accessory