Gergely Bilkei-Gorzo

Specialist Embedded Systems

Project Overview

2019

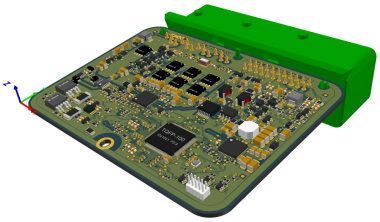
Integrated a sidestick steering device into a Ferrari 458 Steer-by-Wire prototype, ensuring seamless functionality with the vehicle's control system.

2018

Developed software for a dSPACE AutoBox analog sensor extension board, enhancing its sensor integration and performance.

2021

Performed hardware testing, provided design consulting, managed PCB layout, and developed test software for a serial production automotive ECU.



2020

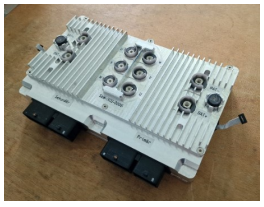
Designed and implemented a bootloader and Ethernet driver, and ported FreeRTOS, LWIP, and PTP for an automotive zone ECU used in the UNICARagil autonomous shuttle.

2023

Designed hardware and developed software for a Steer-by-Wire system supporting both hand and wheel actuation. Responsibilities included motor control algorithms, functional software, sensor data processing, and safety-critical steering models considering ISO 26262 requirements. Integrated and tested the system in an AMG GT prototype.

2022

Designed hardware and developed software for a Steer-by-Wire system—including motor control algorithms, functional software, sensor data processing, and safety features—and integrated it into a VW ID.3 prototype considering ISO 26262 safety requirements.



2023

Developed an application management system that leverages the unused computing power of autonomous vehicles for external applications, as part of a doctoral thesis in the AUTOtech.agil project.

AUTOtech.agil