Les Torgovets

BACHELOR OF EMBEDDED
SYSTEMS ENGINEERING

Contact

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in Les Torgovets

Skills

Tech skills
C/C++, C#, VHDL, Qt, mathcad, fusion 360,
R&D, prototyping, PCB design, soldering

Theory skills
Linear algebra, complex algerbra, calculus
Planimetrics, solid geometry, mechanics

Soft skills
Teamwork, Flexibility, Rationality

Languages
English(C1), Russian(native speaker),
Ukranian(native speaker)

About

I'm a second-year Engineering student at HAN University of Applied Sciences in the Netherlands, specializing in Embedded Computer Systems. I have a strong background in mathematics, physics, and programming, with a proven track record of success in both academic and professional settings. I am a winner of multiple mathematics and physics competitions and have gained valuable commercial experience in the field.

Education History

Bachelor in embedded systems engineering

HAN University of applied sciences — Aug 2022 – Present

Lyceum diploma of advanced math and physics

Kyiv-Pechersk Lyceum №171 "Leader" — Sep 2010 – Jul 2022

Certification diploma of game development

Golteens — Apr 2018 – Jun 2021

Certification diploma of robotics, 3d design and management

Junior Academy of Sciences of Ukraine — Sep 2014 – Aug 2018

Work Experience

Main Directorate of Intelligence of Ukraine

External research and development engineer — Dec 2023 – Aug 2025

HAN University

Student Council of Automotive and Engineering Academy — Sep 2023 – Jul 2024

Regterschot Racing

Embedded systems engineer — Aug 2023 – Jul 2024

GolTeens

Game development tutor — Jan 2022 – Feb 2024

Dream Make

Junior C# Unity developer — Jan 2023 – Mar 2023

Verkhovna Rada of Ukraine(Parliament of Ukraine)

Personal Assistant — May 2019 – Aug 2019

Projects

Website for finding trips

This project will provide a tool that automatically generates a complete vacation or trip. Built with ASP.NET, it utilizes HTML and C#, and integrates with external APIs such as Amadeus to find and plan the most cost-effective and time-efficient travel routes. The full itinerary includes airport transfers, flight tickets, accomodation and transfers there, and return arrangements.

Smart house based on blockchain

During this project, I developed a modular smart house system built as enclosed testing environment designed to improve knowledge of Web3 and Web 3.0 concepts. Each smart house module is built on ESP32 MCU, chosen due to built-in hardware cryptographic accelerator. Communication between modules is implemented using the ESP-NOW protocol. The user interface is implemented both as a physical device based on a standard module and as a web-based interface. The project emphasizes providing users with an experience in creating broad spectre of automation algorithms and implementing them using smart contracts.

Sensor data logger for racing car

This project was developed under Regterschot Racing, where I served as the team lead. The primary objective was to design a device capable of interfacing with a wide range of sensors to collect data about the car or environment. The device reads sensor values and logs the data to the car's computer via the CAN bus. The system was built around an ARM Cortex-M7 core, with an ESP8266 handling the web interface and an ATTINY441 managing a plug-and-play (PnP) extension interface. The sensors supported digital, analog, and current loop signal types and operated at voltages ranging from 3.3V to 12V provided to sensors by device. The plug-and-play interface used a custom protocol based on a modified RS232 standard, allowing easy integration of diverse extension modules. Example of a PnP module was a physical interface module, which allowed users to interact directly with the system without involving web inteface.

Cargo UAV

As a big aviation engineering enthusiast, I was involved in the development of first-generation light drones for the Ukrainian Armed Forces during the early days of the war in Ukraine. The drone was based on an octocopter design and constructed using civilian components. The key modification distinguishing it from standard civilian drones was a custom-built shell-dropping mechanism, capable of carrying and deploying up to 12 kg of payload.

Automated environmental control platform

One of my first big engineering projects was an automated greenhouse system, which I originally built for my grandfather. It was designed to manage a variety of sensors and actuators. For example, it included rain and fire detection systems, as well as sensors for light, moisture, and humidity. The system also controlled actuators for watering, lighting, ventilation, humidification, and heating. The entire system was powered by an ATmega328. Over time, this project evolved into a environmental control platform suitable for enclosed biospheres, such as terrariums, aquariums, incubators, and more.

Unnamed project

This project was developed for the Main Directorate of Intelligence of the Ministry of Defence of Ukraine through the Brave One military innovation platform. It is based on the NXP i.MX RT1010 microcontroller. During this project, I gained extensive experience working with highquality multichannel audio systems and the USB protocol.