



Serkan Doğan Evin

Electronics, Embedded Systems & Software

Mechanical Engineering student · IZTECH

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I build products end to end: from circuit boards and embedded firmware to servers and AI infrastructure. I learned KiCad at 10; at 16, ozone sensors I designed went into serial production and were used by Sütaş, Coca-Cola, Kılıç Balık and Bahçivan Gıda. In October 2024 I co-founded the IZTECH Racing Formula Student team, where I lead the electronics, software and autonomous teams. I am the founder of Evo Digital, a U.S.-based software company.

EXPERIENCE

- Oct 2024 – Co-founder · Electronics, Software & Autonomous Lead · IZTECH Racing**
Co-founded the Formula Student team. LV architecture, CAN communication, embedded systems, telemetry and autonomous software for electric and combustion cars.
- 2024 – Founder & Software Developer · Evo Digital Marketing**
U.S.-based digital marketing and software company. E-commerce platforms, corporate web apps, automation and server operations.
- 2022 – Windsurfing Coach · Göztepe SC · Nilda Elvin Evin**
Trained national team athletes. Coach of my sister Nilda Elvin Evin: 2× World and 2× European champion. Level 1 Assistant Coach.
- 2019 – 2021 Embedded Product Developer · Ozone sensor product line**
Boards, firmware and serial production of industrial and portable ozone sensors.

SELECTED PROJECTS

- 2024 – IZTECH Racing · vehicle electronics**
In October 2024 a few friends and I founded the IZTECH Racing Formula Student team at IZTECH. I lead the electronics, software and autonomous teams for our electric and combustion race cars.
- Building the team from scratch: structure, recruiting, task split
 - Low-voltage (LV) electrical architecture of the car
 - CAN Bus in-vehicle communication
- 2019 – 2021 Ozone gas sensor product line**
Industrial and portable devices that keep ozone released for disinfection at levels safe for people. They went into serial production and were used by Sütaş, Coca-Cola, Kılıç Balık, Bahçivan Gıda, tourism companies and shopping malls.
- ESP8266 firmware with an embedded web UI and OTA updates
 - END, ELT, PRT and PLG board families drawn in KiCad, order sets V2→V4
 - I milled prototype boards on my own CNC with FlatCAM
- 2026 aicp · AI control plane**
My own infrastructure for running my server, two Macs and desktop through AI agents with persistent sessions. Agents hand work to each other and keep notes in my vault; risky operations go through approval.
- Python service + SQLite: agent registry, message queue, event log
 - Each agent turn runs in its own memory-limited systemd unit
 - A typed, journaled repair tool for root operations that rolls back on failure

2026

PREKİT · design to product

A browser-based editor for 40×60 profile construction kits such as pergolas and winter gardens. A kit drawn in the editor is rendered automatically on a Mac, passes my approval and is published to the store.

- Assembly rules in code: corner plates, rafter joints, braces
- Automatic product renders with Blender
- Approval queue: no kit is published without sign-off

2021

IZTECH Environmental Eng. · measurement systems

For the department's research I built IoT particulate matter measurement systems and an algorithm that measures algae concentration from images.

- Alphasense OPC-R2 PM sensor on Arduino UNO/Leonardo
- Nextion display and data logging
- Image-processing algorithm for algae concentration, published as a web tool

MORE PROJECTS (SELECTION)

2026

NodeCard ESP32 rev3 — An ESP32-S3 based CAN node board: KiCad schematic and PCB, 120 Ω termination, BOM and handbook.

2026

Synced Player — A distributed audio system that plays the same track on three computers within ±2 ms. Clock drift is measured over UDP and corrected.

2026

AI VJ — A real-time video mixing instrument in Swift and Metal. Eight 1080p60 layers in 0.65 ms of GPU time per frame.

2023 –

Electronode and Project Nexus — AI-assisted circuit analysis and a SPICE + microcontroller simulator that runs in the browser.

2022

LoRa sailing athlete tracker — LoRa and GPS based systems that track sailors' position and performance.

2020 – 2021

Serial communication protocol — A multi-UART protocol with master/relay/sensor nodes. It ran in an egg incubator with an MQTT bridge; submitted to TÜBİTAK.

2019

NFC-card computer access system — Software that manages shared computers with NFC card login and user credits. Prepared for the İzmir Bar Association.

2017 – 2018

Hydrogen fuel production — A system that produces and uses hydrogen as an alternative fuel, built for TÜBİTAK.

SKILLS

Hardware

KiCad · PCB · STM32 · ESP32 / ESP8266 · Arduino · CAN Bus · LV electrical architecture · LoRa · GPS · NFC · Sensor integration

Mechanical

SolidWorks (CSWA) · Fusion 360 · STEP · 3D printing · CNC · FlatCAM · Blender

Software

C / C++ · Python · Swift · SwiftUI · Metal · TypeScript · React · Node · MQTT · Docker · PostgreSQL · Linux server ops

AI & automation

LLM agents · MCP · Claude Agent SDK · Image processing

EDUCATION

Izmir Institute of Technology — B.Sc. Mechanical Engineering (ongoing)

Dr. Güngör Özbek Anatolian High School

Asiye Hüseyin Akyüz Science Middle School

CERTIFICATES

CSWA – Certified SolidWorks Associate

Level 1 Assistant Coach (Anadolu University, Ministry of Youth and Sports)

LANGUAGES

Turkish (native) · English

SPORTS & LEADERSHIP

Windsurfing since 2017; professional athlete 2017–2020, coach since 2022. I coach my sister Nilda Elvin Evin: 2× World Champion (2025 Pwllheli, 2026 Foça) and 2× European Champion (2025 Rome, 2026 Sopot) in the Techno 293 class.