Eralp Çelebi

Electrical-Electronics Eng. Student

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Education

Sakarya University	Turkey, Sakarya
Electrical-Electronics BEng.	September 2022 • Present

Cumulative GPA: 2.70 / 4.00

Sakarya University	Turkey, Sakarya
Physics BSci.	September 2023 • Present

Cumulative GPA: 3.01 / 4.00

Tomas Bata University	Czechia, Zlín
Erasmus+ Exchange Student	September 2023

Experience

GESK Technology	Turkey, Istanbul
Embedded Software Engineering Internship	August 2024

- Worked on the *Raspberry Pi 3 B+* platform.
- Developed embedded operating systems for the said platform using tools such as **The Yocto Project**, **GNU Make** and using the **C Programming Language**.

Certificates

SQL and PostgreSQL: The Complete Developer's Guide	May 2025
MATLAB Onramp	January 2024

Skills

Languages	Turkish (Native Speaker), English (C1), German (Entry), Czech (Entry)
Programming Languages	C, C++, Rust, Golang, Python, Kotlin, Typescript, SQL

Contests

CodeFest	Turkey, Istanbul
Contester in the annual festival hosted by the *Üsküdar American High School*.	2019

Hisar Coding Summit	Turkey, Istanbul
Contestor in the annual coding summit hosted by *Hisar Schools*.	2019

PiWars Turkey	Turkey, Istanbul
Contestor in the annual robotics competition hosted by *Hisar Schools*.	2019

Projects

Mainlining Linux on Android Devices

 EralpCelebi/linux_*

Embedded Development

aarch64

- Worked on Android devices such as,
  1. *Xiaomi Mi 8* • Qualcomm SDM845 Snapdragon 845
  2. *Xiaomi Redmi Note 12* • Qualcomm SM4375 Snapdragon 4 Gen 1
  3. *Xiaomi Pad 5* • Qualcomm Snapdragon 860
- Ported Mainline Linux to said devices using tools such as **kbuild**, **GNU Make** etc.

Porting Downstream Android Drivers to UEFI

 EralpCelebi/MU-sm8150pkg

Embedded Development

aarch64, UEFI

- Ported the downstream drivers for the fast-charging integrated circuit *BQ2597x* for the Xiaomi Pad 5.
- Added ACPI descriptors using the **ACPI Source Language (ASL)** to the community maintained secondary UEFI bootloader.

Artifical Intelligence Command-line Tool

 EralpCelebi/fir

Software Development

Golang

- Uses OpenAI's ChatGPT API's to run mutable commands in local shells according to user specifications, isolated using Linux's container infastructure.

Linux Containerization Solution

 EralpCelebi/spinup

Software Development

Golang

- Command-line tool that allows users to quickly create local containers using Linux namespaces.

Reference Bootloader

 EralpCelebi/damascus-boot

Embedded Development

NASM, GNU Make

- A bootloader written purely in assembly targeting the *x86_64* architecture. It's ultimate purpose is to be an educational resource and is well documented.

Programming Language

 EralpCelebi/zet-redone

Software Development

Python, LLVM

- A statically typed and compiled systems programming language using the *LLVM* compiler backend infastructure with the aim of unifying winning aspects of the most popular programming languages.

Operating System

 EralpCelebi/oasys

Embedded Development

CMake, C, UEFI

- A UN*X-like operating system with a modern build system.

Experienced In

Web Development (Typescript)

React (Next.js), Drizzle, Clerk, Vercel, ChakraUI, TailwindCSS, PostgreSQL, Docker, Docker Compose, Posthog

Web Development (Golang)

Chi, Gorilla, Goose, PostgreSQL, htmx, Alpine.js, TailwindCSS, JWT, Docker, Docker Compose

Back-end Development (Rust)

Actix, Tokio, SQLx, PostgreSQL, Docker, Docker Compose, JWT