

# Ceyhun Şen

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## Work Experience

### Chainway Labs

**chainway.xyz - İstanbul / Türkiye**

Software Engineer | 03.24 - Today

**Skills:** Rust, Bitcoin, RISC-V Assembly, Low Level Software

*I work on a state-of-the-art Bitcoin bridge, called Clementine. This work involves developing a high performing low level software, that is written in Rust. I also worked on a transpiler, which converted RISC-V assembly language to a virtual machine (BitVM).*

### Inventron Electronics And Software

**inventron.com.tr - İstanbul / Türkiye**

Embedded Software Engineer | 09.23 - 03.24

Part-time Embedded Software Engineer | 02.23 - 08.23

Embedded Software Intern | 08.22 - 01.23

**Skills:** C, C++, Linux Kernel, U-Boot Bootloader, Yocto Project, Android (kernel and distribution side)

*I worked on both Linux kernel drivers and board support package development for NXP i.MX based microprocessors and custom SOC's. This work involves writing new or updating existing device drivers/functionalities for various chips and peripherals. All to provide BSP's to complex SOM's and SOC's.*

### Enterans

**Bursa / Türkiye**

Part-time Embedded Software Engineer | 03.2022 - 06.2022

**Skills:** C, STM32, ESP8286

*I worked on writing platform independent peripheral drivers for various microcontrollers in C. Drivers I wrote, used on different microcontrollers.*

## Education

• Bursa Technical University | 08.19 - 08.23 | Computer Engineering Major | GPGA: 2.89

• Haydarpaşa High School | 09.15 - 06.19

• Middle School Mathematical Olimpiads | 09.12 - 06.14

## Projects

### ATmega328P HAL Driver

[github.com/ceyhunsen/ATmega328P-HAL-Driver](https://github.com/ceyhunsen/ATmega328P-HAL-Driver)

Hardware abstraction layer driver for ATmega328P microcontroller. Written in C. Includes documentation (Doxygen), unit and integration tests. Tests have a mock interface which can act like real hardware.

### MPU-925X Sensor Driver

[github.com/ceyhunsen/mpu925x-driver](https://github.com/ceyhunsen/mpu925x-driver)

Platform independent driver for MPU-9250 and MPU-9255 IMU sensors. Written in C. Includes documentation (Doxygen), unit and integration tests. Tests have a mock interface which can act like real hardware.

### BMP180 STM32 Sensor Driver

[github.com/ceyhunsen/bmp180-stm32-driver](https://github.com/ceyhunsen/bmp180-stm32-driver)

Targeted specifically for STM32 microcontrollers and uses STM32 HAL drivers. Written in C.

## Skills

### Main Skills

- Software development with low level languages like C, C++ and Rust
- Embedded software programming
- Linux Kernel development
- Designing software architecture and writing comprehensive documentation

### Languages

- Turkish | Native
- English | Profesional working proficiency

### Programming Languages

C, C++, Rust, Python, Bash, Javascript, CSS, HTML, Java, C#,  $\LaTeX$

### Code Libraries And Frameworks

Linux driver stack, U-Boot driver model, STM32 HAL Drivers, React Native, Jekyll

### Technologies And Platforms

Linux Kernel, Bitcoin, Git, GCC, Makefile/CMake, NXP i.MX ARM microprocessors, STM32 microcontrollers, AVR AT-Mega microcontrollers, Arduino, Inkscape