Ceyhun Şen

Work Experience

Chainway Labs

chainway.xyz - İstanbul / Turkiye

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 software, that is written in Rust. I also worked on a transpiler, which converted RISC-V assembly language to a virtual machine (BitVM).

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.

Inventron Electronics And Software

inventron.com.tr - İstanbul / Turkiye

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)

Enterans

Bursa / Turkiye

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

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

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

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#,

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