

UYGAR BÜYÜKKAHRAMAN

Software Engineer

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WORK EXPERIENCE

Çukurova Elektromobil

Embedded Software Developer

Adana, Türkiye

Oct 2021 – Sep 2023

- Wrote two distinct telemetry systems (by myself), one based on LoRa, and another based on the SIM800L's HTTP facilities.
- The second telemetry system made extensive use of cryptography, which did cause a single major third-party dependency to be included (regarding P256 signatures).
- Participated in the software development of many other components such as the *engine control unit* and the *battery management system*.

EDUCATION

Çukurova University

Bachelor of Science in Computer Engineering (GPA: 3.31)

Adana, Türkiye

Sep 2021 – Present

- **Thesis:** (to be written) Implementation of a realtime voxel-based path tracer.

PROJECTS

TeleV2

Çukurova Elektromobil, github.com/xor-shift/TeleV2

Oct 2021 – Oct 2022

- A telemetry system for the STM32 based on the SIM800L which was utilized by our hydrogen car.
- Communicates with a server using a custom messaging protocol with P256 signatures.

"Stuff"

Unaffiliated, github.com/xor-shift/stuff

Feb 2023 – Present

- A collection of Boost-inspired C++ libraries including compile time reflection facilities.

HONORS AND AWARDS

Finalist in ITUACM algoComp 2021

Issued by ITUACM

Online, Türkiye

Feb 2021

- Participated solo
- Placed 15th in the qualifiers, placed 14th in the finals

Participant in Advent of Code (2022)

Issued by *Eric et. al.*

Online

Dec 2022

- Best first-part placement of 506 on day 25, best second-part placement of 438 on day 15

Participant in Advent of Code (2021)

Issued by *Eric et. al.*

Online

Dec 2021

- Best first-part placement of 380 on day 16, best second-part placement of 402 on day 23

LICENSES AND CERTIFICATIONS

Yapay Zeka Uzmanlık Programı Uzmanlık Eğitimi (116 class hours)

Issued by *T.C. Sanayi ve Teknoloji Bakanlığı*

ID: 71446400053292

Aug 2024

Teknofest Birincilik (Hidromobil)

Issued by *Teknofest*

ID: 78558960407386

Oct 2023

Teknofest Birincilik (Elektromobil)

Issued by *Teknofest*

ID: 29074075385596

Oct 2022

SKILLS, LANGUAGES, INTERESTS

- **Languages:** Turkish (Native speaker), English (Fluent), German (Intermediate)
- **Programming:** C & C++ (been writing since middle school), Rust, Go, Zig, C#, Java, Python, JS
- **Tools:** Linux (been daily driving since middle school), Git, Nix, Docker, Neovim