

**Hasan Mutlu** Eskişehir Computer Engineering Student

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# EDUCATION

# •Gebze Technical University

2019 -

GPA: 3.07

Computer Engineering Bachelor's

#### EXPERIENCE

### •Birleşik Yazılım

July - August 2022

Gebze, Kocaeli

Software Development Intern

- Worked on the company's website as Full Stack Developer. HTML-CSS-Javascript are used alongside C# and SQL on ASP.NET Core.

# •TEI (Tusaş Engine Industries)

January 2024 -

Candidate Embedded Software Engineer

Eskişehir

## **PUBLICATIONS**

• Fatma Nur Esirci, Hasan Mutlu, Alp Arslan Bayrakci, "FPGA Based Verification for the Difficulty of Delay Based Hardware Trojan Detection" 14th International Conference on Electrical and Electronics Engineering (ELECO), 2023.

#### PROJECTS

### •Appointment Application on Android •

School Project

— Within the scope of the Software Engineering course, an Android application was developed as a group project. The application allows customers to make appointments with professionals who are experts in their fields. In the project, both front-end and back-end parts were involved. Flutter was used while developing the app. Agile methods were used throughout the project.

# •Hardware Trojan Detection Using Delay Based Methods on FPGA 🗘 🗘

Graduation Project

- This project aims to detect hardware trojans on the FPGA by measuring the delay values of a single sample logical circuit path and its infected versions. Verilog HDL language is used. In the first semester of the project, a significant difference was detected in the delay values between the clean path and its infected versions, and the method proved to be effective. In the second semester, it was aimed to detect trojans that managed to hide in cases where intra-chip and inter-chip variations were effective on delay values using the "Delay Rate" method.
- This project paved the way for the conference paper mentioned above.

### Other Projects

You can access my other projects from my website.

#### SKILLS

C / C++: Advanced Level **Python:** Advanced Level **Java:** Advanced Level

Verilog HDL: Advanced Level Flutter / Dart: Intermediate Level Assembly: Intermediate Level SQL: Intermediate Level Javascript: Intermediate Level HTML - CSS: Beginner Level

C#: Beginner Level

# LANGUAGES

Turkish: Native

English: Proficient