FURKAN GÖKSEL

(+90) 507 654 83 98 ⋄ furkan.goksel27@gmail.com

github.com/frkngksl ⋄ linkedin.com/in/frkngksl/

EDUCATION

Middle East Technical University, Ankara   *2016 - Present*
Department of Computer Engineering   CGPA: 3.84

PROJECTS

Process Tracer
The project aims to monitoring and manipulating the system calls made by a Linux Process through a browser-based interface. With this kind of manipulating option, the project provides researchers to ease analyzing the system calls of the suspicious programs. The project is fully written in C language.

AgriLoRa: A Smart Agriculture Framework (in submission for Journal of Wireless Mobile Networks, Ubiquitous Computing, and Dependable Applications)
This project aims to develop a complete cost-effective Smart Agriculture Solution. In this project, I'm responsible for establishing Wireless Sensor Network using LoRa modules. More specifically, I am trying to add new Ad-Hoc routing protocols for communication between LoRa gateways. The novelty is standard LoRaWAN protocol uses star topology, but AgriLoRa uses mesh topology to eliminate Internet connection necessity.

Think Before You Fire (in submission for IoTDI2021: The 6th ACM/IEEE Conference on Internet of Things Design and Implementation)
This project aims to solve ordering problems in IoT systems components, espacially for Smart Home environments. It was my summer internship research project in Purdue University under the advisorship of Asst. Prof. Z. Berkay Celik.

Web Application Firewall Administration Tool (WAFADM)
This project aims to ease the usage of ModSecurity Web Application Firewall by implementing rule parsers, generators, access zones and new functionalities. This is my graduation project under the advisorship of Dr. Onur Tolga Şehitoğlu.

TECHNICAL STRENGTHS

Simulation   OmNet++
Languages   C, C++, Python, MySQL, PIC Assembly, x86 Assembly, Java, Lua

WORK EXPERIENCE

Asst. Prof. Z. Berkay Çelik, Purdue University   July 2020 - October 2020
Undergraduate Student Researcher

· I was accepted to his research group, and I had been doing a research about IoT systems and their security.

Secrove Information Security Consulting, Istanbul   March 2020 - September 2020
Security Researcher

· Working in an EDR project of the company and researching new security areas.

Secrove Information Security Consulting, Istanbul   March 2019 - September 2019
Intern

· During my internship, I performed penetration tests for mobile and web applications. Also, I developed
Process Tracer here.

PRESENTATIONS / TALKS

A New Approach to Dynamic Analysis: Process Tracer   30 May 2020
BSCon2020

· I have made a presentation about system calls, manipulation of them and an analysis tool, that is
written by me, Process Tracer.

AWARDS / HONORS

- GUIDED2020: 2nd Guided Research Symposium 1st place with project AgriLoRa

- ICS & IoT Cyber Security Bootcamp CTF: Blackout 1st place with team KöpükRF