FURKAN GÖKSEL

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EDUCATION

Middle East Technical University, Ankara

Department of Computer Engineering

2016 - Present 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

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.

TECHNICAL STRENGTHS

Simulation OmNet++

Languages C, C++, Python, MySQL, PIC Assembly, x86 Assembly

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 one of the company's project and researching new security areas.

${\bf Secrove\ Information\ Security\ Consulting,\ Istanbul}$

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 BSCon2020

30 May 2020

· 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