ASUMAN SENOL

+32 471772543 | www.asumansenol.com | asumansenol@gmail.com | https://github.com/asumansenol

SUMMARY

I am a Privacy Researcher in the Privacy and Identity Management Group at COSIC under the supervision of [Assistant Professor Gunes Acar](#) and [Professor Claudia Diaz](#). I work on online tracking, web privacy, browser fingerprinting. We conduct large-scale web measurement studies to investigate privacy and security issues on the Web. Before starting my doctoral studies, I worked as a full-stack web developer for 5 years.

EXPERIENCE

Student Researcher (Intern)

Google LLC. - Zurich/Switzerland

January 2023 - May 2023

- Worked on [Privacy Budget](#) project.
- ML-based login signup page detection was implemented to examine browser fingerprinting attempts on those kinds of pages.

Application Development Engineer

Roketsan Missiles Inc. - Ankara/TURKEY

April 2017 - April 2020

- Development of web applications with ASP.NET MVC using Agile methodologies
- Development of mobile applications with React Native
- Development of Web APIs and deployment of them to Azure
- Bug fixing and adding new features to existing projects

Software Engineer

ONUR YÜKSEK TEKNOLOJİ A.S. - Ankara/TURKEY

Jan 2016 - April 2017

- Frontend development in Voice Communication System project using BackboneJS
- Full stack development in a desktop project using JAVA FX

Software Engineer

ICTERRA Bilgi ve İletişim Teknolojileri San. Tic. A.S. - Ankara/TURKEY

Feb 2015 - Jan 2016

- Full stack development in the internal ERP project using JAVA Spring and AngularJS

EDUCATION

Doctor of Philosophy - Ph.D., Web Privacy

KU LEUVEN - Leuven/BELGIUM

April 2020 - Now

- Conducting large-scale empirical studies on online tracking mechanisms
- Development of an advanced JavaScript analysis tool (Web Inspector) that can produce a complete trace of JavaScript execution with the associated context and metadata (e.g. line and column numbers, script addresses) in addition to HTTP requests, cookies, targets on the pages
- Development of web crawler for research studies using Node.js and puppeteer
- Running crawls on the most popular web pages(on 100K, 1M) to inspect online trackers
- Analyses of survey data with Python and Jupyter Notebooks

Master of Science - MS, Cyber Security

METU - Ankara/TURKEY

Sep 2015 - June 2017

- While pursuing this master, I learned a lot about secure software development lifecycle, penetration testing methods, network security, the legal dimension of cyber security, cryptography and cryptanalysis. I wrote my master's thesis about the cryptanalysis of one important lightweight algorithm; Rectangle. With my study, the attack on Rectangle was improved

Bachelor of Science - BS, Mathematics

METU - Ankara/TURKEY

Sep 2010 - June 2015

- In addition to the Advanced Mathematical courses, I took several courses from CS Department like OOP with JAVA, Algorithms and Data Structures, Database Management Systems

SKILLS & TOOLS

- Node.js
- JavaScript
- Python
- Chrome Devtools Protocol
- Puppeteer
- Data analysis
- Web development (C#, ASP.NET MVC 5, ASP.NET Web API, Hangfire, Razor View)
- Mobile Application Development (React Native)
- SQL - PL/SQL

- ORM (Entity Framework)
- AWS Services

AWWARDS

1. [2022 CNIL-Inria Award for Privacy Protection (2023)](#)

Leaky Forms: A Study of Email and Password Exfiltration Before Form Submission (USENIX Security'22)

PUBLICATIONS

1. A. Senol, G. Acar, F. Z. Borgesius Prof. F.J., and M. Humbert, "[Leaky Forms: A Study of Email and Password Exfiltration Before Form Submission](#)," In 31st USENIX Security Symposium 2022, Usenix, 18 pages, 2022.

2. [Improved differential attacks on Rectangle](#), Master Thesis, Aug 15, 2017

3. [Differential Attacks on Lightweight Block Ciphers PRESENT, PRIDE and RECTANGLE Revisited](#), **ISCTurkey,** 2017

4. [On Differential Factors](#), **LightSec,** 2016