

# **ASUMAN SENOL**

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## **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. Before starting my doctoral studies, I was working as a full stack web developer in the defense industry.

## **EXPERIENCE**

### **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 into 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 - PhD, 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 learnt a lot about secure software development lifecycle, penetration testing methods, network security, legal dimension of cyber security, cryptography and cryptanalysis. I wrote my master thesis about 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

## **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