

# ASUMAN SENOL

+32 471 77 25 43 | [www.asumansenol.com](http://www.asumansenol.com) | [asumansenol@gmail.com](mailto:asumansenol@gmail.com) |  
<https://github.com/asumansenol> | <https://medium.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. Before starting my doctoral studies, I was working as a full stack web developer in the defense industry.

## EXPERIENCE

### **COSIC (KU Leuven)**

*Privacy Researcher / April 2020-present*

- Conducting large-scale empirical studies on online tracking mechanisms.
- Developing 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).
- Developing browser add-on against personal data exfiltration.

Technology and Tools: NodeJS · Puppeteer · Web Scraping · Chrome Developer Tools · Python (Programming Language) · Chrome Extensions · JavaScript · Online Privacy · Online Tracking

### **Roketsan Missiles Inc.**

*Application Developer / April 2017-April 2020*

- Development of web applications according to the needs of the company with ASP.NET MVC, Oracle DB by 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,

Technology and Tools: C#, ASP.NET MVC 5, React Native, Oracle DB, PL/Sql, MS SQL Server, MS SQL Server Management Studio, MS Visual Studio, GIT, Entity Framework, Hangfire

### **Onur Muhendislik A.S.**

*Software Engineer / Jan 2016-April 2017*

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

Technology and Tools: Backbone JS, JAVA FX, JavaScript, MySQL, JIRA, Git, Eclipse

## **ICTERRA Bilgi ve İletişim Teknolojileri San. Tic. A.S.**

Software Engineer / Feb 2015-Jan 2016

- Full stack development in the internal ERP project.

Technology and Tools: AngularJS, Play Framework, JAVA, Spring, MySQL, JIRA, Jenkins, Git, Eclipse

## **EDUCATION**

### **Doctor of Philosophy / KU LEUVEN / 2020-2024**

- 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
- Running crawls on the most popular web pages (on 100K, 1M) to detect personal information leaks to 3rd party trackers
- Analyses of survey data with Python and Jupyter Notebooks

### **Master of Science / METU / 2015-2017**

- 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 / METU / 2010-2015**

- After completing my compulsory courses in the Mathematics Department, I had the opportunity to develop myself in computer science by taking courses like OOP with JAVA, Algorithms and Data Structures, Database Management Systems.

## **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. A. Senol, G. Acar, and M. Humbert, "Think Before You Type: A Study of Email Exfiltration Before Form Submission," In SecWeb Workshop, 13 pages, 2021.
3. [Improved differential attacks on Rectangle](#), Master Thesis, Aug 15, 2017
4. [Differential Attacks on Lightweight Block Ciphers PRESENT, PRIDE and RECTANGLE Revisited](#), **ISCTurkey**, 2017
5. [On Differential Factors](#), **LightSec**, 2016