ASUMAN SENOL

Rue Mercelis 89 Box: 2 1000 Brussels/BELGIUM | +32 471 77 25 43 | www.asumansenol.com |
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 .NET 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: Puppeteer · Web Scraping · Chrome Developer Tools · Python (Programming Language) · Chrome Extensions · JavaScript · NodeJS · 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