

Sibel Gulmez

Graduate Researcher



About me

I am a passionate researcher conducting studies on cyber security. Currently, I am a Ph.D. candidate studying on the detection of ransomware.

Areas of specialization

Cyber Security
• Ransomware • Malware Analysis
• Code Analysis
• Malware Detection

Languages

Turkish
English

Programming

C
C#
Java
Python
Javascript
Angular.js
HTML5/CSS
SQL

Affiliations

GTU Nislab
(Gebze Technical University,
Network and Information
Security Laboratory)

Google Scholar

LinkedIn

Webpage

E-mail

Phone

ACADEMIC EMPLOYEMENT

2020-... **Research Assistant**
COMPUTER ENGINEERING DEPARTMENT, GEBZE TECHNICAL UNIVERSITY
· Kocaeli, Türkiye
- Conducting analyses and tests for the detection of malware.
- Publishing academic papers.
- Assisting courses in the department.
- Mentoring undergraduate students.



DEGREES

2021 - ... **Doctor of Philosophy in Computer Engineering**
GEBZE TECHNICAL UNIVERSITY · Kocaeli, Türkiye
GPA: 3.71 - Thesis: Hybrid Analysis-Based Ransomware Detection



2018 - 2021 **Master of Science in Cyber Security**
GEBZE TECHNICAL UNIVERSITY · Kocaeli, Türkiye
GPA: 3.43 - Thesis: Graph-based malware detection using opcode analysis



2013 - 2017 **Bachelor of Science in Mathematics and Computer Science**
ISTANBUL AYDIN UNIVERSITY · Istanbul, Türkiye
GPA: 3.96



PUBLICATIONS

2024 Analysis of the Zero-Day Detection of Metamorphic Malware
2024 XRan: Explainable deep learning-based ransomware detection using dynamic analysis
2023 Log Mining-based Online Failure Prediction in Client-Server Architecture
2023 Analysis of the Dynamic Features on Ransomware Detection Using Deep Learning-based Methods
2022 Sequential opcode embedding-based malware detection method
2021 Graph-based malware detection using opcode sequences

ASSISTED COURSES

CSE101 Introduction to Computer Engineering and Career Planning
CSE102 Computer Programming (in C)
CSE107 Introduction To Computer Science Laboratory
CSE108 Computer Programming Laboratory
CSE222 Data Structures And Algorithms (with Java)
CSE321 Introduction To Algorithm Design
CSE331 Computer Organizations
CSE470 Cryptography and Computer Security
CSE495 Graduation Project I
CSE496 Graduation Project II
CSE521 Advanced Topics in Algorithms
CSE691 Seminar I
CSE692 Seminar II

ACADEMIC PRESENTATIONS

2024 Analysis of the Zero-Day Detection of Metamorphic Malware (9th International Conference on Computer Science and Engineering UBMK 2024)
2023 Log Mining-based Online Failure Prediction in Client-Server Architecture (8th International Conference on Computer Science and Engineering UBMK 2023)
2023 Analysis of the Dynamic Features on Ransomware Detection Using Deep Learning-based Methods (11th International Symposium on Digital Forensics and Security)
2021 Graph-based malware detection using opcode sequences (9th International Symposium on Digital Forensics and Security)

ACADEMIC ACTIVITIES

2022 FPGA / Verilog from Scratch. Gebze Technical University. Kocaeli, Türkiye.
2020 Cyber Security Winter Camp. Bogazici University. Istanbul, Türkiye
2019 Malware Workshop. Gebze Technical University. Kocaeli, Türkiye.

PROJECTS

2022-... Multi-Purpose Malware Detection and Prevention Method Development (Scientific Research Project, Gebze Technical University)

SCHOLARSHIPS

2022-... Scientific Research Project Scholarship, Gebze Technical University
2014-2017 Merit-based scholarship, Istanbul Aydin University

REFERENCES

Prof. Dr. Ibrahim Sogukpinar Gebze Technical University, Turkey ispinar@gtu.edu.tr
Assoc. Prof. Arzu Gorgulu Kakisim Istanbul Medeniyet University, Turkey arzu.kakisim@medeniyet.edu.tr