



József Sándor

Nationality: Hungarian, Romanian **Date of birth:** 14/03/2000

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ABOUT ME

I earned my B.Sc. and M.Sc. degrees in Computer Engineering from the Budapest University of Technology and Economics (BME). My primary field of expertise and interest is IT security. I consider myself a hardworking and ambitious person who is not afraid of new challenges. Furthermore, I'm always keen to learn new technologies and understand everything as thoroughly as possible. Additionally, in my free time, I do many sports, read, and watch movies.

EDUCATION AND TRAINING

Computer Engineering (MSc)

Budapest University of Technology and Economics [02/2022 – 01/2024]

City: Budapest

Country: Hungary

Field(s) of study: IT Security | Integration of Mobile Networks and Services

Final grade: Excellent with highest honours (4.85/5.0)

Thesis: Improving the robustness of similarity-based IoT malware detection methods against adversarial samples

2023/24 winter semester at Technical University of Munich with Erasmus+ program.

Computer Engineering (BSc)

Budapest University of Technology and Economics [09/2018 – 01/2022]

City: Budapest

Country: Hungary

Field(s) of study: Software Engineering

Final grade: Excellent with highest honours (4.93/5.0)

Thesis: In-silico simulation framework in Julia environment

PUBLICATIONS

Increasing the Robustness of a Machine Learning-based IoT Malware Detection Method with Adversarial Training

[2023]

In Proceedings of the ACM Workshop on Wireless Security and Machine Learning (WiseML), June 1, Guildford, UK.

PATRIoTA: A Similarity-based IoT Malware Detection Method Robust Against Adversarial Samples

[2023]

In Proceedings of the IEEE Symposium on intelligent Edge Computing and Communications (iEDGE), July 7, Chicago, USA.

WORK EXPERIENCE

Research Assistant

Fraunhofer AISEC [01/11/2023 – 30/04/2024]

City: Munich

Country: Germany

Description: Side-channel power analysis of masked AES implementations.

Research Assistant

CrySyS Lab [22/05/2022 – 30/09/2023]

City: Budapest

Country: Hungary

Description: Increasing the robustness of similarity-based IoT malware detection methods.

Software developer

Kinepict Health Kft. [01/06/2021 – 01/09/2022]

City: Budapest

Country: Hungary

Description: Development and testing of the company's main product, which is a unique medical device software called Kinepict Medical Imaging Tool.

CONFERENCES AND SEMINARS

Student Scientific Conference at BME

[Budapest, Hungary., 2023]

Title: A New Method for Increasing the Robustness of Similarity-based IoT Malware Detection.

Student Scientific Conference at BME

[Budapest, Hungary., 2022]

Title: Robustness Against Evasion of Similarity-based IoT Malware Detection Methods.

LANGUAGE SKILLS

Mother tongue(s): **Hungarian**

Other language(s):

English

LISTENING C1 READING C1 WRITING C1

SPOKEN PRODUCTION C1 SPOKEN INTERACTION C1

Romanian

LISTENING B2 READING B2 WRITING B2

SPOKEN PRODUCTION B2 SPOKEN INTERACTION B2

German

LISTENING A2 READING A2 WRITING A2

SPOKEN PRODUCTION A2 SPOKEN INTERACTION A2

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Java / Python / C++ / Git / SQL / Linux / Microsoft Office / Latex / C#

HOBBIES AND INTERESTS

Sports

Swimming; Cycling; Hiking; Workout

Culture

Cinematography; Literature; Theater