europass

József Sándor

Date of birth: 14/03/2000 | **Nationality:** Hungarian | **Email address:** sjozsef2000@gmail.com

ABOUT ME

I am currently a Computer Science Engineer (MSc) student. 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. I'm always keen to learn new technologies and I like to understand everything as thoroughly as possible. In my free time I do a lot of sports, reading and watching movies.

EDUCATION AND TRAINING

01/10/2023 – 31/03/2024 Munich, Germany
COMPUTER ENGINEERING (MSC) - ERASMUS+ Technical University of Munich

01/02/2022 – 17/01/2024 Budapest, Hungary
COMPUTER SCIENCE ENGINEERING (MSC) Budapest University of Technology and Economics

Field of study IT Security, Integration of Mobile Networks and Services |

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

01/09/2018 – 01/02/2022 Budapest, Hungary
COMPUTER SCIENCE ENGINEER (BSC) Budapest University of Technology and Economics

Field of study Software Engineering | **Final grade** Excellent with highest honours |

Thesis In-silico simulation framework in Julia environment

WORK EXPERIENCE

01/11/2023 – 30/04/2024 Munich, Germany
RESEARCH ASSISTANT FRAUNHOFER AISEC

Power side-channel analysis of AES implementations.

22/05/2022 – 30/09/2023 Budapest, Hungary
RESEARCH ASSISTANT CRYSYS LAB

Similarity-based IoT malware detection.

01/06/2021 – 01/09/2022 Budapest, Hungary
SOFTWARE DEVELOPER KINEPICT HEALTH KFT.

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

LANGUAGE SKILLS

Mother tongue(s): **HUNGARIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1
ROMANIAN	B2	B2	B2	B2	B2

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#

ADDITIONAL INFORMATION

PUBLICATIONS

Increasing the Robustness of a Machine Learning-based IoT Malware Detection Method with Adversarial Training
– 2023

In Proceedings of the 2023 ACM Workshop on Wireless Security and Machine Learning (WiseML '23).

PATRIoTA: A Similarity-based IoT Malware Detection Method Robust Against Adversarial Samples – 2023

IEdge IEEE 2023 Symposium.

CONFERENCES AND SEMINARS

17/11/2022 – 17/11/2022 – Budapest
Scientific Students' Association Report (TDK) In the autumn semester of 2022, I participated in the Scientific Students' Association Report (TDK) and I won first prize with my thesis in the embedded systems section. In the CrySyS laboratory, together with my consultants Levente Buttyán and Roland Nagy, we are working on technologies that increase the security of the IoT devices. This resulted in the TDK thesis entitled: Robustness Against Evasion of Similarity-based IoT Malware Detection Methods. As the title suggests, we designed attacks against existing IoT malware detection systems and then we made our systems more resilient against these attacks.

HOBBIES AND INTERESTS

Sports
- swimming
- cycling
- hiking
- workout

Culture
- Cinematography
- Literature
- Theater