Tamás Girászi

4225 Debrecen
Bajza József Street 16
+36 (30) 693 5773
giraszi.tamas@gmail.com

Professional Experience

2023 - **Research Assistant**, *University of Debrecen, Faculty of Informatics*

Nov 2019 - 2023 **Participation in University Project**, *University of Debrecen, Faculty of Informatics*

- Design and integration of a speed sensor into autonomous model cars
- Research on Deep Learning-based technologies for autonomous vehicles
- Investigation of graph embedding algorithms
- Cell detection and intensity value calculation using computer vision
- Demonstrator
  - Foundation of Computer Security
  - Cryptography
  - Introduction to Programming
- Secretary of the Data Security Workshop at György Hajós Data Science College
- University of Debrecen Talent Program
- Exploration of development possibilities for offline dictionary attacks against passwords

Education

2023 – **PhD Student**, *University of Debrecen, Doctoral School of Informatics, "Theoretical Computer Science, Data Protection and Cryptography"*, Debrecen, PhD

2022–2023 **Software Engineer**, *University of Debrecen, Faculty of Informatics*, Debrecen, MSc

2018–2021 **Computer Science Engineer**, *University of Debrecen, Faculty of Informatics*, Debrecen, BSc

2014–2018 **Specialization in Informatics**, *Báthory István Catholic Elementary School, High School and Vocational School*, Nyírbátor

- Advanced courses in Informatics and Mathematics

Professional Skills

GNU/Linux	Basic knowledge of mainly Debian-based systems
git	Basic knowledge
Office Software Packages	Proficiency in Microsoft Office and LaTeX(This CV is written in LaTeX)
Python	I work with Python frameworks for my blockchain (Solana and Ethereum), Deep Learning, and Computer Vision-related projects; knowledge of Anaconda, Web3, Solana, Keras, TensorFlow, and OpenCV
Java	Knowledge appropriate to my degree
C/C++	Knowledge appropriate to my degree
Bash	Automation of routine tasks

Courses

2020 **NVIDIA Deep Learning Institute Certificate** Fundamentals of Deep Learning for Computer Vision
https://courses.nvidia.com/certificates/85600f13ba364af79cc906eaa51edaa4

2021 **The Complete Cyber Security Course: Hackers Exposed!**
https://www.udemy.com/certificate/UC-2504ade5-3cb6-493b-96d7-14c39c6ab17b/

2022 **NVIDIA Deep Learning Institute Certificate** Fundamentals of Deep Learning
https://courses.nvidia.com/certificates/2205ce557fa74268a16a7f195bdcaa23

2022 **NVIDIA Deep Learning Institute Certificate** Getting Started with AI on Jetson Nano
https://courses.nvidia.com/certificates/7ad6f188d20b41dcb47e62daaeea2f1a

2023 **SCADEMY Secure Coding Academy Ltd.** AI Fundamentals
https://cert.scademy.com/certificate/DfTNuHDLbvdOCwNIYzpw

2023 **SCADEMY Secure Coding Academy Ltd.** AI For Software Developers
https://cert.scademy.com/certificate/SVLvuDmpcomjNbozkGhi

2023 **SCADEMY Java and Web Application Security**
https://cert.scademy.com/certificate/yShzchenHSDvWszjsTSa

Scholarships and Awards

2018 **Morus Award** For Student Community Activities

2021 **TDK Paper** Efficiency Examination of Graph Embedding Algorithms for the Advancement of Smart City Development, 2nd place

2021 **National Higher Education Scholarship**

2021 **Dean's Commendation of the Faculty of Informatics** for academic achievements

2022 **TDK Paper** Behavior-Based Autonomous Driving of Model-Sized Vehicles Using Resolution-Independent Neural Networks, 3rd place

2022 **TDK Paper** Development of a Digital Actuator Sensor System for Autonomous Model Cars, 3rd place

2022 **National Higher Education Scholarship**

2023 **Student Memorial Medal of the Faculty of Informatics**

Publications

TDK **Tamás Girászi, Tamás Takács**: Efficiency Examination of Graph Embedding Algorithms for the Advancement of Smart City Development

Tamás Girászi, Gergő Tamás Legény: Behavior-Based Autonomous Driving of Model-Sized Vehicles Using Resolution-Independent Neural Networks

Tamás Girászi, Ferenc Mári, Csaba Zolnai: Development of a Digital Actuator Sensor System for Autonomous Model Cars

Scientific Articles **Tiba, A., Hajdu, A. & Giraszi, T.**(2024). Finding Efficient Graph Embeddings and Processing them by a CNN-based Tool. Neural Processing Letters, 56(5), 226. doi:10.1007/s11063-024-11683-0

A. Huszti, T. Girászi, N. Oláh: "Blockchain-Based Messaging for VANETs," 2023 Congress in Computer Science, Computer Engineering, & Applied Computing (CSCE), Las Vegas, NV, USA, 2023, pp. 2443-2450, doi: 10.1109/CSCE60160.2023.00394.

L. Kovács, D. Baranyai, T. Girászi, T. Majoros, Á. Kovács, M. Vágner, D. Palkovics, T. Bérczes: "Sensor design and integration into small sized autonomous vehicle," 2022 IEEE 2nd Conference on Information Technology and Data Science (CITDS), Debrecen, Hungary, 2022, pp. 171- 176, doi: 10.1109/CITDS54976.2022.9914037.

Language Skills

English B2 complex language exam

Other Activities

Mentor in the EFOP-3.4.3-16-2016-00021 project