

**FACULTATEA DE AUTOMATICĂ  
ȘI CALCULATOARE**



**INFORMAȚII PERSONALE**

Numele și prenumele

Telefon / Fax

E-mail

Sebestyen Pal Gheorghe

**0264 401489,**

**Gheorghe.sebestyen@cs.utcluj.ro**

**EXPERIENȚĂ PROFESIONALĂ**

• Data

• Loc de muncă

• Profesia

• Ocupația

• Activitatea principală

• Conducător de doctorat

• Domeniul

• Data

• Loc de muncă

• Ocupația

• Activitatea principală

1996 - prezent

Universitatea Tehnica din Cluj-Napoca, Departamentul  
Inginer

Profesor universitar, conferentiar si Sef de lucrari

Activitati didactice si de cercetare

Da

Domeniul conducerii de doctorat: Stiinta calculatoarelor

1985-1996

Institutul de tehnica de calcul ITC, filiala Cluj-Napoca

cercetator

Cercetare si dezvoltare de produse informaticice si de calcul

**EDUCAȚIE ȘI STUDII DE  
CALIFICARE**

• Anul

• Numele si tipul organizației

• Titlul obținut

• Specializarea

• Anul

• Numele si tipul organizației

• Titlul obținut

• Specializarea

1997-2003

Universitatea Tehnica din Cluj-Napoca

Doctor inginer

Calculatoare

1980-1985

Universitatea Tehnica din Cluj-Napoca

inginer

calculatoare

**ACTIVITATE DIDACTICĂ**

Titular al cursurilor	Programul de studii	Anul
Sisteme cu microprocesoare	Automatică și Informatică Aplicată	II
Microprocessor-based Systems	Automatica engleza	II
Structura Sistemelor de calcul	Calculatoare și Tehnologia Informatiei	III
Programare in limbaj de asamblare	Calculatoare și Tehnologia Informatiei	I

Informatica industriala	Tehnologia informatiei	IV
Informatica industriala	Master dom. Calculatoare	I
Programare si securitate la nivelul arhitecturii x86	Master SISC	I

## ACTIVITATE ȘTIINȚIFICĂ

### TEME DE CERCETARE

Sisteme de calcul dedicate  
 Retele industriale de comunicatii  
 Detectia anomaliei prin tehnici de inteligenta artificiala  
 IoT, IIoT, Industry 4.0  
 Aplicatii informatice in medicina  
 Securitatea sistemelor

Lucrări științifice (peste 130) și cărți (7), dintre care lucrări mai recente:  
Lucrari stiintifice

1. Serban, CM; Sebestyen, G and Hangan, A, ECG Data Classification With Privacy Preservation in the IoT Context, 2024, 2024 IEEE 3RD CONFERENCE ON INFORMATION TECHNOLOGY AND DATA SCIENCE, CITDS 2024 , pp.199-204
2. Portase, RM; Portase, RL; (...); Sebestyen, G., LEDA-Layered Event-Based Malware Detection Architecture, Sensors 2024
3. Portase, RM; Colesa, A and Sebestyen, G, SpecRep: Adversary Emulation Based on Attack Objective Specification in Heterogeneous Infrastructures, Sensors, 2024
4. Portase, RM; Muntea, AM; (...); Sebestyen, G, Detection Strategies for COM, WMI, and ALPC-Based Multi-Process Malware, Sensors, 2024
5. Ticovan, IV and Sebestyen, G, Forensic Investigation of Data Storage Systems, 2024 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS, AQTR,, pp.15-21
6. Serban, CM; Sebestyen, G and Hangan, A, Anomaly Detection in Water Consumption Patterns Using Prediction and Clustering Approaches, 2024 IEEE INTERNATIONAL CONFERENCE ON AUTOMATION, QUALITY AND TESTING, ROBOTICS, AQTR pp.3-8
7. Radu-Marian Portase, Adrian Coleșa, Gheorghe Sebestyen, Efficient Multi-Stage Detection of Malicious Windows Executable During Execution, 2023 IEEE 19th International Conference on Intelligent Computer Communication and Processing (ICCP)
8. Zoltan Czako, Gheorghe Sebestyen, Anca Hangan, Benchmarking Anomaly Detection Algorithms using Hyperparameter Optimization, 2023 IEEE 19th International Conference on Intelligent Computer Communication and Processing (ICCP)
9. Aurel-Dragoș Hofnăr, Tamás Bakos, Gheorghe Sebestyen-Pal, Protecting Against Caller ID Spoofing Attacks Using In-band Signaling, 2023 IEEE 19th International Conference on Intelligent Computer Communication and Processing (ICCP)
10. Zoltan Czako, Anca Hangan, Dragos Lisman, Gheorghe Sebestyen, Marcus-Mihai Deszi, A Prototype System for Urban Water Consumption Monitoring and Anomaly Detection, 2022 IEEE 18th International Conference on Intelligent Computer Communication and Processing (ICCP), 2022
11. Stefan Lucian Popa, Teodora Surdea-Blaga, Dan Lucian Dumitrescu, Giuseppe Chiarioni, Edoardo Savarino, Liliana David, Abdulrahman Ismaiel, Daniel Cornelius Leucuta, Imre Zsigmond, Gheorghe Sebestyen, Anca Hangan, Zoltan Czako, Automatic Diagnosis of High-Resolution Esophageal Manometry using Artificial Intelligence, Journal of Gastrointestinal & Liver Diseases, editura MDPI, 2022,
12. Anca Hangan, Costin-Gabriel Chiru, Diana Arsene, Zoltan Czako, Dragos Florin Lisman, Mariana Mocanu, Bogdan Pahontu, Alexandru Predescu, Gheorghe Sebestyen, Advanced Techniques for Monitoring and Management of Urban Water Infrastructures—An Overview, revista Waters, ed. MDPI, 2022
13. Andrei Luțăș, Gheorghe Sebestyen, Raul Toşa, Adrian Coleșa, VE-VMI: High-Performance Virtual Machine Introspection Based on Virtualization Exception, 2021 20th International Symposium on Parallel and Distributed Computing (ISPDC)
14. Czako, Z., Sebestyen, G., Hangan, A. Colorectal image classification with transfer learning and auto-adaptive artificial intelligence platform, Advances in Intelligent Systems and Computing, 1160 AISC, pp. 534-543
15. G Sebestyen, A Hangan, Z Czako, Anomaly detection in water supply infrastructure systems, 2021 23rd International Conference on Control Systems and Computer Science (CSCS), 2021
16. G. Sebestyen, A. Hangan, A. Misin, "Travel assistant for persons with visual disabilities", IEEE AQTR 2020, International conference on Automation, Quality, Testing and Robotics, 2020, Cluj-Napoca
17. Z Czako, G Sebestyen, A Hangan, COVID-19 Preliminary Patient Filtering based on Regular Blood Tests using Auto-Adaptive Artificial Intelligence Platform, 2020 IEEE-ICCP2020 16th International Conference on Intelligent Computer
18. Zoltan Czako, Anca Hangan, Gheorghe Sebestyen, Teodora Surdea-Blaga, Stefan L. PopaI, "IRP Classification and Probe Positioning Failure Detection in High-Resolution Esophageal Manometry using Machine Learning", 8th Int. Conf. on Mathematics and Informatics, September 9-10, 2021, Târgu Mureș, Romania
19. Z Czako, G Sebestyen, A Hangan, "AutomaticAI-A Hybrid Approach for Automatic Artificial Intelligence Algorithm Selection and Hyperparameter Tuning", in journal Expert Systems with Applications, Editor Elsevier Volume 182, 15 November 2021,

Carti si capitol de carti mai recente

1. Z. Czako, Gh. Sebestyen, A. Hangan, Artificial Intelligence Algorithms Selection and Tuning for Anomaly Detection, Studies in Computational Intelligence book series, Springer 2021
2. Z. Czako, Gh. Sebestyen, A. Hangan, Trends and Innovations in Information Systems and Technologies. Volume 2. Chapter:"Colorectal Image Classification with Transfer Learning and Auto-Adaptive Artificial Intelligence Platform" p.534-543, ISBN 978-3-030-45691-7, Springer 2020
3. Oprîșa, C., Cabău, G., Pal Sebestyen, G., Multi-centroid Cluster Analysis in Malware Research/ in Advances in Intelligent Systems, Springer 2018
4. Zoltán Szántó, Lörinc Márton, Sebestyén György, Supervised Robot Groups with Reconfigurable Formation: Theory and Simulations, Springer Lecture Notes in Computer

GRANTURI, CONTRACTE DE  
CERCETARE

Contracte de cercetare (peste 30) , dintre care cele mai recente:

1. Watergame - Sistem de management pentru monitorizarea consumurilor de apa, 2020-2022
2. Servicii de transfer de cunoștințe în domenii inovative: retele senzoriale și tehnologii RFID, 2018-2019
3. SIPADOC – Integrated system for reevaluation of national cultural patrimony, 2011
4. EGI-Inspire – European Grid Initiative, FP7 project, 2010-2013
5. Proinova – Digital library for research and innovation, 2015
6. Managementul depozitelor, contract Silcotub Zalau, 2015-16

Cluj-Napoca, 2.06.2025

Prof.dr.ing. Gheorghe Sebestyen

