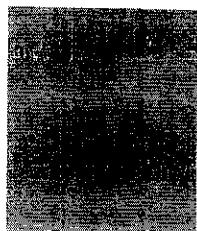


## INFORMATII PERSONALE



Murvay Pal-Ştefan



Sexul

Data nașterii

Naționalitatea

## POSTUL PENTRU CARE SE CANDIDEAZĂ

**Şef lucrări/Lector universitar**

2016-prezent	<b>Şef lucrări/Lector universitar</b> Facultatea de Automatică și Calculatoare, Universitatea Politehnica Timișoara
2014-2016	<b>Cadru didactic asociat</b> Facultatea de Automatică și Calculatoare, Universitatea Politehnica Timișoara
2014-2018	<b>Software developer</b> SC Lasting Software SRL, Timișoara
2005-2014	<b>Software developer</b> SC Continental Automotive România SRL, Timișoara

## EXPERIENȚA PROFESIONALĂ

2010-2014	<b>Studii doctorat</b> Facultatea de Automatică și Calculatoare, Universitatea Politehnica Timișoara , Timișoara
2008-2010	<b>Studii master</b> Facultatea de Automatică și Calculatoare, Universitatea Politehnica Timișoara , Timișoara
2003-2008	<b>Studii universitare, ciclul licență</b> Facultatea de Automatică și Calculatoare, Universitatea Politehnica Timișoara , Timișoara

## EDUCAȚIE ȘI FORMARE

Limba(i) maternă(e)

Română

## Alte limbi străine cunoscute

	INTELEGERE		VORBIRE		SCRIERE
	Ascultare	Citire	Participare la conversație	Discurs oral	
Engleza	C1	C1	C1	C1	C1
Franceza	A1	A1	A1	A1	A1

## COMPETENȚE PERSONALE

## Competențe de comunicare

- bune competențe de comunicare dobândite prin experiența proprie de lucru în echipă și prin procesul de predare

Competențe dobândite la locul de muncă	▪ cunoașterea proceselor de control al calității și a etapelor implicate în procesul de dezvoltare a produselor software pentru domeniul embedded
Competențe informaticе	▪ o bună cunoaștere a instrumentelor Microsoft Office™ ▪ utilizare LaTeX ▪ o buna cunoaștere a proceselor și uneltelelor implicate în dezvoltarea de produse software embedded ▪ abilități de programare în C, C++
Permis de conducere	▪ A,B

**INFORMAȚII SUPLIMENTARE**

Cursuri	Urmat cursurile școlii de vară Advanced Computer Architecture and Compilation for High-Performance and Embedded Systems (ACACES'11), Fiuggy, Italia, iulie 2011.
Teza de doctorat	Pal-Stefan MURVAY, Cryptographic Security for Vehicular Controller Area Networks, Editura Politehnica, România, Feb. 2014, ISBN 978-606-554-774-2
Director proiecte de cercetare	▪ SEVEN (proiect național de cercetare pentru Postdoctoranzi 2018-2020), Security Enhancements and Vulnerability assessment for industry-standard Networks, Resurse Umane, PN-III-P1-1.1-PD-2016-1198, în calitate de director și cercetător postdoctoral. ▪ Proiect finanțat prin UEFISCDI. Valoarea finanțării: 219837 RON ▪ Lucrări relevante: <ul style="list-style-type: none"><li>• P.S. Murvay, B. Groza, A brief look at the security of DeviceNet communication in industrial control systems, The second Central European Cybersecurity Conference (CECC 2018), 2018</li><li>• P.S. Murvay, B. Groza, Practical security exploits of the FlexRay in-vehicle communication protocol, The 13th International Conference on Risks and Security of Internet and Systems (CRYSIS 2018), 2018</li></ul>
Membru în proiecte de cercetare	▪ PRESENCE (proiect național de cercetare pentru Tinere Echipe 2018 - 2020), Private and secure interactions between vehicles and intelligent electronic devices, Resurse Umane, PN-III-P1-1.1-TE-2016-1317, în calitate de cercetător postdoctoral. ▪ cSeAmaN (proiect național de cercetare în cadrul programului pentru Tinere Echipe 2014-2016), Cryptographic Security for Automotive Embedded Devices and Networks, Resurse Umane, PN-II-RU-TE-2014-4-1501, în calitate de cercetător postdoctoral. ▪ DISSIS (national research grant PN2 2008-2011), Cercetări în Designul și Implementarea unor Soluții moderne pentru Securitatea Informației în Sisteme distribuite SCADA, DCS, și de control la distanță cu aplicații în distribuția gazelor, IDEI, PN2 940/2008, în calitate de cercetător doctorand.

## Lucrări științifice

- B. Groza, P.S. Murvay, Efficient Intrusion Detection with Bloom Filtering in Controller Area Networks (CAN), *IEEE Transactions on Information Forensics and Security*, accepted for publication, 2019
- C. Jichici, B. Groza, P.S. Murvay, Examining the Use of Neural Networks for Intrusion Detection in Controller Area Networks, *The 11th International Conference on Security for Information Technology and Communications (SECITC 2018)*, 2018
- P.S. Murvay, B. Groza, A brief look at the security of DeviceNet communication in industrial control systems, *The second Central European Cybersecurity Conference (CECC 2018)*, 2018
- P.S. Murvay, B. Groza, Practical security exploits of the FlexRay in-vehicle communication protocol, *The 13th International Conference on Risks and Security of Internet and Systems (CRISIS 2018)*, 2018
- B. Groza, L. Popa, P.S. Murvay, INCANTA - INtrusion detection in Controller Area Networks with Time-covert Authentication, *International Workshop on Cyber Security for Intelligent Transportation Systems (CSITS'18, in conjunction with ESORICS 2018)*, 2018
- T.S. Andreica, B. Groza, P.S. Murvay, Applications of pairing-based cryptography on automotive-grade microcontrollers, *The 1st International Workshop on Safety, Security and Privacy in Automotive Systems (STRIVE'18, affiliated to SAFECOMP 2018)*, 2018
- H. Gurban, B. Groza, P.S. Murvay, Risk assessment and security countermeasures for vehicular instrument clusters, *The 4th International Workshop on Safety and Security of Intelligent Vehicles (SSIV'18, affiliated to DSN 2018)*, 2018 (full paper)
- P.S. Murvay, B. Groza, Security shortcomings and countermeasures for the SAE J1939 commercial vehicle bus protocol, *IEEE Transactions on Vehicular Technology*, Vol 67, Issue 5, 2018
- B. Groza, P.S. Murvay, Security solutions for the CAN bus - bringing authentication to in-vehicle networks, *IEEE Vehicular Technology Magazine*, Vol 13, Issue 1, March 2018
- P.S. Murvay, B. Groza, DoS Attacks on Controller Area Networks by Fault Injections from the Software Layer, *The 3rd International Workshop on Secure Software Engineering*, affiliated with the 12th International Conference on Availability, Reliability and Security (ARES'17), 2017
- B. Groza, P.S. Murvay, A. van Herrewege, I. Verbauwheide, LiBrA-CAN: Lightweight Broadcast Authentication for Controller Area Networks, *ACM Transactions on Embedded Computing Systems (TECS)*, Vol 16, Issue 3, April 2017 (extended version of paper presented at CANS'12)
- B. Groza, H. Gurban, P.S. Murvay, An experimental model for in-vehicle networks and subsystems, *The 3rd International Conference on Vehicle Technology (VEHITS'17)*, 2017 (position paper)
- B. Groza, T. Andreica, P.S. Murvay, Designing wireless automotive keys with rights sharing capabilities on the MSP430 microcontroller, *The 3rd International Conference on Vehicle Technology (VEHITS'17)*, 2017 (short paper)
- B. Groza, P.S. Murvay, T. Andreica, Evaluating SRAM as Source for Fingerprints and Randomness on Automotive Grade Controllers, *The 13th International Conference on Security and Cryptography (SECRYPT'16)*, 2016 (full paper)
- P.S. Murvay, A. Matei, C. Solomon, B. Groza, Development of an AUTOSAR Compliant Cryptographic Library on State-of-the-Art Automotive Grade Controllers, *The 11th International Conference on Availability, Reliability and Security (ARES'16)*, 2016 (full paper)
- B. Groza, H. Gurban, P.S. Murvay, Designing security for in-vehicle networks: a Body Control Module (BCM) centered viewpoint, *The 2nd International Workshop on Safety and Security of Intelligent Vehicles (SSIV'16, affiliated to DSN 2016)*, 2016 (full paper)
- P. Vasile, B. Groza, P.S. Murvay, Performance analysis of broadcast authentication protocols on CAN-FD and FlexRay, *Workshop on Embedded Systems Security (WESS'15)*, ACM, 2015
- P.S. Murvay, B. Groza, Source Identification Using Signal Characteristics in Controller Area Networks, *IEEE Signal Processing Letters*, Vol. 21, Issue 4, 2014
- P.S. Murvay, B. Groza, Performance Evaluation of SHA-2 Standard vs. SHA-3 Finalists on two Freescale Platforms, *International Journal of Secure Software Engineering (IJ SSE)*, Vol. 4, Issue 4, 2013
- B. Groza, P.S. Murvay, Efficient Protocols for Secure Broadcast in Controller Area Networks, *IEEE Transactions on Industrial Informatics*, Vol. 9, Issue 4, pp. 2034-2042, 2013
- B. Groza, P.S. Murvay, Secure Broadcast with One-Time Signatures in Controller Area Networks, *International Journal of Mobile Computing and Multimedia Communications (IJMCMC)*, Vol. 5, Issue 3, pp. 1-18, 2013
- B. Groza, P.S. Murvay, A. Van Herrewege, I. Verbauwheide LiBrA-CAN: a Lightweight Broadcast Authentication protocol for Controller Area Networks, *The 11th International Conference on Cryptology and Network Security (CANS'12)*, 2012
- B. Groza, M. Minea, M. Cristea, P.S. Murvay, M. Iacob, Protocol vulnerabilities in practice: causes, modeling and automatic detection, *Proceedings of the Romanian Academy, Series A*, Vol. 13, No. 2, April-June, 2012
- P.S. Murvay, I. Silea, A survey on gas leak detection and localization techniques, *Journal of Loss Prevention in the Process Industries*, Volume 25, Issue 6, November 2012, Elsevier
- B. Groza, P.S. Murvay, Broadcast Authentication in a Low Speed Controller Area Network, *e-Business and Telecommunications*, Springer CCIS, 2012

- P.S. Murvay, B. Groza, Performance improvements for SHA-3 finalists by exploiting microcontroller on-chip parallelism, The Sixth International Conference on Risks and Security of Internet and Systems (CRISIS'11), 2011
- P.S. Murvay, I. Silea, Design and implementation of a reliable gas leak detection system for domestic environments , The 15th International Conference on System Theory, Control, and Computing (ICSTCC'11), 2011
- B. Groza, P.S. Murvay, Secure Broadcast With One-Time Signatures In Controller Area Networks, The Sixth International Conference on Availability, Reliability and Security (ARES'11), 2011 [BibTeX]
- B. Groza, P.S. Murvay, I. Silea, T. Ionica, Cryptographic authentication on a 8051 based development board, The Third International Conference on Internet Monitoring and Protection (ICIMP'08), IEEE Comp. Soc., 2008