

Academic Curriculum Vitae

PERSONAL DETAILS

Name: Pungilă
Surname: Ciprian-Petrișor
Nationality: Romanian

PUBLISHED PAPERS

- *A portable, two-tier client-server architecture for remote task management. eRIMP, Distributed Systems - Masters Paper, January 2007*
- *A parallel implementation of arbitrary-length integer multiplication. The Karatsuba algorithm, Parallel Computing - Masters Paper, June 2007*
- *Static file analysis using checksums and the finite state automata model, June 2006 / June 2007, Final Thesis Paper for BS Degree of Mathematics and Computer Science (West University of Timișoara) / Computer Science (Software Engineering, Politehnica University of Timișoara)*
- *Static And Dynamic Data Analysis for Intrusion Detection Systems (IDS), Final Thesis Paper for MS Degree in Computer Science, West University of Timișoara, 2008*
- *Dynamic Code Analysis Through Extended System-Call Matching for Intrusion Detection Systems, Timișoara Academic Days, West University of Timișoara, 29th of May, 2009*
- *Sensor Reading: Storing and Querying Benchmarks for Existing Database Engines, Timișoara Academic Days, West University of Timișoara, 29th of May, 2009*
- *Benchmarking Database Systems for the Requirements of Sensor Readings, Ciprian Pungilă, Aritoni Ovidiu, Teodor-Florin Fortiș, 1st International Workshop on Database Architectures for the Internet of Things, University of Birmingham, 6th of July, 2009*
- *Ciprian Pungila, Ovidiu Aritoni, and Teodor-Florin Fortis, Benchmarking Database Systems for the Requirements of Sensor Readings, IETE Technical Review 26 (2009), no. 5, 342-349.*
- *A Bray-Curtis Weighted Automaton for Detecting Malicious Code Through System-Call Analysis, Ciprian Pungilă, Symbolic and Numeric Algorithms for Scientific Computing - SYNASC 2009, Timișoara, Romania, 2009*
- *A Model for Energy-Efficient Household Maintenance Through Behavioral Analysis of Electrical Appliances, Ciprian Pungilă, The First International Workshop on Engineering Low-Carbon Business (ELCB'10) at 2010 IEEE International Conference on e-Business Engineering (ICEBE 2010), Shanghai, 2010*

- Ciprian Pungila and Viorel Negru, *A Highly-Efficient Memory-Compression Approach for GPU-Accelerated Virus Signature Matching*, Proceedings of 8th International Information Security Conference (ISC), Lecture Notes In Computer Science, 2012
- Ciprian Pungila, *Improved File-Carving Through Data-Parallel Pattern Matching for Data Forensics*, 7th IEEE International Symposium on Applied Computational Intelligence and Informatics (SACI), 2012, ISBN 978-1-4673-1013-0, pp. 197-202
- Ciprian Pungila, *Towards Efficient Structural Mapping of Files In Data Forensics*, Scientific Bulletin of the "Politehnica" University of Timișoara, Transactions on Automatic Control and Computer Science, 2012
- Ciprian Pungila, *Hybrid Compression of the Aho-Corasick Automaton for Static Analysis in Intrusion Detection Systems*, International Joint Conference CISIS12-ICEUTE12-SOCO12 Special Sessions, Advances in Intelligent Systems and Computing, vol. 189, Springer Berlin Heidelberg, 2013, 10.1007/978-3-642-33018-6_8, pp. 77-86
- Ciprian Pungila, *Heterogeneous Pattern Matching for Intrusion Detection Systems and Digital Forensics*, PhD dissertation, 2012
- Ciprian Pungila and Viorel Negru, *Towards Building Efficient Malware Detection Engines Using Hybrid CPU/GPU-Accelerated Approaches*, Architectures and Protocols for Secure Information Technology, IGI Global, 2013
- Ciprian Pungila and Viorel Negru, *Real-Time Polymorphic Aho-Corasick Automata for Heterogeneous Malicious Code Detection*, International Joint Conference CISIS13-ICEUTE13-SOCO13 Special Sessions, Advances in Intelligent Systems and Computing, vol. 239, Springer Berlin Heidelberg, 2013, 10.1007/978-3-319-01854-6_45, pp. 439-448
- Ciprian Pungila, Mario Reja and Viorel Negru, *Efficient Parallel Automata Construction for Hybrid Resource-Impelled Data-Matching*, Future Generation Computer Systems, vol. 36, 10.1016/j.future.2013.09.008, pag. 31-41
- Ciprian Pungila and Viorel Negru, *An Efficient Heterogeneous Approach to Building Compressed Automata for Malware Signature Matching*, International Joint Conference CISIS14-ICEUTE14-SOCO14 Special Sessions, Advances in Intelligent Systems and Computing, vol. 299, Springer Berlin Heidelberg, 2014, 10.1007/978-3-319-07995-0_41, pp. 413-422
- Ciprian Pungila, Bogdan Manate and Viorel Negru, *A Heterogeneous Fault-Resilient Architecture for Mining Anomalous Activity Patterns in Smart Homes*, International Joint Conference SOCO '15-CISIS'15-ICEUTE'15, 2015, in Advances in Intelligent Systems and Computing, vol 369. Springer, pp. 133-143
- Ciprian Pungila and Viorel Negru, *Real-Time Hybrid Compression of Pattern Matching Automata for Heterogeneous Signature-Based Intrusion Detection*, International Joint Conference SOCO'15-CISIS'15-ICEUTE'15, 2015, in Advances in Intelligent Systems and Computing, vol. 369, pp. 65-74

- Ciprian Pungila and Viorel Negru, *FAST: A High-Performance Architecture for Heterogeneous Big Data Forensics*, International Joint Conference SOCO'17-CISIS'17-ICEUTE'17, 2017, Proceedings of SOCO 2017, CISIS 2017, ICEUTE 2017 in Advances in Intelligent Systems and Computing, vol 649. Springer, pp. 618-627
- Ciprian Pungila, Viorel Negru, *Fighting Cyber-Crime Through Digital Forensics. Case-Study: Big Data Trace Analysis*, 1st International Caparica Conference in Translational Forensics, 2017
- Other numerous presentations & talks as invited speaker at several local, national and international events (*complete list available on request*)
- Reviewer (past or present) for
 - Future Generation Computer Systems – Elsevier (FGCS)
 - International Journal of Information Security and Privacy (IJISP) – IGI Global
 - The 7th International Conference on Electronics, Communications and Networks (CECNet 2017)
 - IEEE 13th International Conference on Intelligent Computer Communication and Processing (ICCP 2017)
 - The 3rd International Conference on Fuzzy Systems and Data Mining (FSDM 2017)

INTERESTS

- Computer programming and optimization algorithms, heterogeneous computing
- Cybersecurity, static & dynamic data analysis, data compression, digital forensics