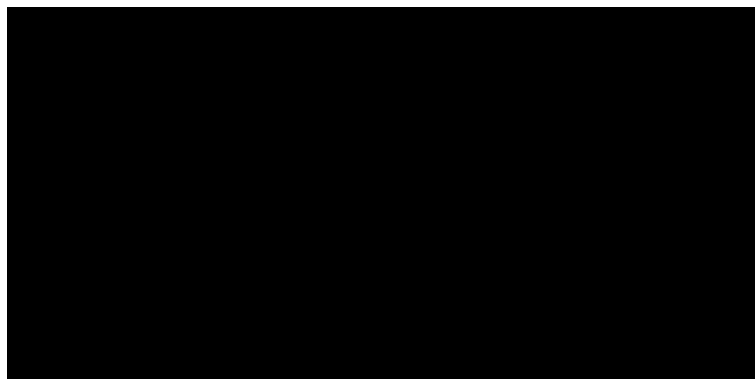




PERSONAL INFORMATION

Darius Galis



CONFERENCE PAPERS

C. Pungilă, D. Galis, and V. Negru, “**Optimizing Pattern-Matching for Memory-Efficient Heterogeneous DNA Processing in Bioinformatics**”, IEEE 12th International Symposium on Applied Computational Intelligence and Informatics (SACI), 2018, pp. 1-5, doi: [10.1109/saci.2018.8441000](https://doi.org/10.1109/saci.2018.8441000), Timisoara, Romania.

C. Pungilă, D. Galis, and V. Negru, “**Survey on Feasibility of Pattern Matching Techniques In Heterogeneous Architectures for Bioinformatics**”, 20th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), 2018, pp. 368-375, doi: [10.1109/SYNASC.2018.00063](https://doi.org/10.1109/SYNASC.2018.00063), Timisoara, Romania.

D. Galis, C. Pungilă, and V. Negru, “**A Fast NFA-Based Approach to Approximate Pattern-Matching for Plagiarism Detection in Blockchain-Driven NFTs**”. In: R. Wrembel, J. Gamper, G. Kotsis, A.M. Tjoa, I. Khalil, (eds) “Big Data Analytics and Knowledge Discovery”. (DaWaK) 2022. Lecture Notes in Computer Science, vol 13428. Springer, Cham., doi: [10.1007/978-3-031-12670-3_5](https://doi.org/10.1007/978-3-031-12670-3_5), Vienna, Austria.

C. Pungilă, D. Galis, and V. Negru, “**A new high-performance approach to approximate pattern-matching for plagiarism detection in blockchain-based non-fungible tokens (NFTs)**”, arXiv preprint doi: [10.48550/arXiv.2205.14492](https://doi.org/10.48550/arXiv.2205.14492).

M. Radovancovici, D. Galis, and C. Pungilă, “**A Practical Analysis of Techniques for Minting Genetic Information as NFTs in Blockchain Technology**”, 24th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), 2022, doi: [10.1109/SYNASC57785.2022.00060](https://doi.org/10.1109/SYNASC57785.2022.00060), Linz, Austria.

M. Radovancovici, D. Galis, and C. Pungilă, “**Using N-Gram Variations in Static Analysis for Malware Detection**”, 24th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNASC), 2022, doi: [10.1109/SYNASC57785.2022.00037](https://doi.org/10.1109/SYNASC57785.2022.00037), Linz, Austria.

JOURNAL PUBLICATIONS

D. Galis, C. Pungilă, and V. Negru, “**Realtime Polymorphic Malicious Behaviour Detection in Blockchain-Based Smart Contracts**”, Logic Journal of the IGPL, vol 32, Issue 2, April 2024, pp 210–223, doi: [10.1093/jigpal/jzae016](https://doi.org/10.1093/jigpal/jzae016).

BOOK CHAPTERS

Metode tehnice pentru detectia rezistenței antimicrobiene folosind arhitectura de tip blockchain. I. Hutu, T. Iancu, (eds): “**Rezistența la preparate antimicrobiene din perspectivă bioeconomică**”, Agroprint, Timisoara, 2021.

ORGANIZING COMITEE

CyberHack UVT 2023 (<https://www.info.uvt.ro/cyberhack-uvt/>).

CyberHack UVT 2024 (<https://cyberhack.day/>).

PATENTS

Metodă și sistem bazate pe tehnologia blockchain pentru raportarea rezistenței la preparatele antimicrobiene (RO135681 (A0)).



AWARDS

Winner of the 2023 ANIS Scholarship for Excellence in Education for the “**Blockchain Technology Between Ideology and Challenge**” program.

WORK EXPERIENCE

[2023 - Current]

Assistant lecturer

West University of Timisoara

- **Operating Systems I & II:** Supported students in understanding core operating system concepts, including process management, memory management, and system architecture.
- **Algorithms and Data Structures:** Guided students through algorithmic problem-solving techniques, emphasizing data structures, efficiency, and algorithm design.
- **Security and Cryptography:** Assisted in teaching cryptographic methods and security protocols, focusing on encryption, authentication, and secure communications.
- **Cryptography and Information Security:** Provided students with insights into advanced cryptographic techniques and the fundamentals of information security practices.
- **Blockchain Technology: Between Ideology and Challenge:** Engaged students in discussions and implementations about the foundations and real-world challenges of blockchain technology.
- **Applications, Approaches, and Challenges in Cybersecurity in the Modern Digital Era:** Helped students explore modern cybersecurity threats, defense mechanisms, and emerging challenges in the digital landscape.
- **Collective Project:** Mentored student teams in collaborative projects, fostering teamwork, critical thinking, and practical application of technical skills.

[2022 - 2024]

Technical Lead

Scitech Software Ltd.

- **Architectural Design and Technical Oversight:** Oversaw the design and implementation of software architecture, driving technical excellence, scalability, and system reliability.
- **Mentorship and Skill Development:** Provided mentorship to junior developers, fostering a collaborative team environment and promoting continuous learning and development.
- **Quality Assurance and Performance Optimization:** Ensured the highest quality standards by implementing best practices in code reviews, testing, and performance optimization.

[2018 - 2023]

Teaching Assistant

West University of Timisoara

[2016 - 2022]

Compiler Developer

CyberThor Studios

- **Full-Stack Development:** Designed, developed, and maintained both front-end and back-end components of software applications (compilers – **GCC/LLVM**, debuggers – **GDB**, APIs – **Eclipse IDE integration**, building, testing and automatization procedures), ensuring thorough technical documentation and robust system performance.



- **Agile Development:** Actively contributed to Agile workflows, participating in sprint planning, daily stand-ups, and iterative development cycles to deliver high-quality software on time.
- **Code Optimization and Performance Tuning:** Improved application performance by optimizing the generated code size, reducing execution times, and ensuring efficient use of resources:
Eg: <https://gcc.gnu.org/legacy-ml/gcc-patches/2020-01/msg01319.html>
<https://gcc.gnu.org/pipermail/gcc-patches/2020-August/552146.html>
- **Collaboration and Teamwork:** Worked closely with cross-functional teams including designers, QA engineers, and product managers to deliver innovative and improved compiler solutions.
- **Debugging and Troubleshooting:** Diagnosed and resolved software defects and performance issues, enhancing the stability and reliability of the compilers.
- **Technology Stack:** Utilized modern technologies [**GCC/LLVM/GIT/GitLab/Docker**], ensuring best practices and maintaining up-to-date technical skills.

EDUCATION AND TRAINING

- [2019 - 2023] **Ph.D. in Computer Science**
West University of Timisoara
 - High-Performance Approximate Pattern-Matching for Bioinformatics and CyberSecurity
- [2021 - 2022] **Post-graduate degree**
West University of Timisoara
 - Entrepreneurship in Blockchain
- [2017 - 2019] **Master's degree**
Politehnica University Timisoara
 - Healthcare information Systems
- [2013 - 2017] **Bachelor's degree**
Politehnica University Timisoara
 - Computer/Software Engineering
- [2009 - 2013] **High School diploma**
“Moise Nicoară” High school, Arad
 - Mathematics – Informatics



PERSONAL SKILLS

Mother tongue(s) Romanian

Other language(s)	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
French	A1	A2	A1	A1	A2

Levels: A1/2: Basic user – B1/2: Independent user – C1/2 Proficient user
Common European Framework of Reference for Languages

Communication skills

- **Clear and Concise Expression:** Consistently able to convey ideas succinctly, making sure that complex information is easily understood by diverse audiences.
- **Effective Presenter:** Skilled in delivering engaging and informative presentations, adapting content to various levels of expertise.
- **Strong Explainer:** Able to break down complicated concepts into simple, digestible components, ensuring full comprehension in educational or professional settings.
- **Public Speaking Proficiency:** Experienced in delivering lectures and workshops to groups of various sizes, maintaining audience engagement and fostering an interactive learning environment.

Job-related skills

- **Adaptable and Quick Learner:** Proven ability to rapidly acquire new skills and adapt to changing environments, providing a smooth transition into new roles or tasks.
- **Highly Responsible:** Demonstrates a strong sense of accountability and dependability by consistently meeting deadlines.
- **Efficiency-Driven:** Skilled in optimizing workflows, managing time effectively, and delivering quality results under pressure.
- **Detail-Oriented:** Maintains accuracy and attention to detail while working efficiently, guaranteeing a high standard of work.

Computer skills

- **Proficient in C and C++:** Extensive experience in developing software solutions using C and C++ for various applications, with a focus on efficiency and performance.
- **Competent in Several Programming Languages:** Skilled in **Java** and **Python** for software engineering, data analysis, and automation tasks.
- **ECDL Certified:** Achieved the European Computer Driving Licence (ECDL) certification during high school, showcasing early mastery of office applications, IT fundamentals, and essential digital skills.

Driving licence

- Category B

Signed today: