Curriculum Vitae
Horațiu Cheval

Personal data

Affiliation: Research Center for Logic, Optimization and Security (LOS),
Department of Computer Science,
Faculty of Mathematics and Computer Science,
University of Bucharest

Education

2021 - 2024	Ph.D. in Mathematics, University of Bucharest
2019 - 2021	M.Sc. in Computer Science Faculty of Mathematics and Computer Science, University of Bucharest
2016 - 2019	B.Sc. in Computer Science Faculty of Mathematics and Computer Science, University of Bucharest

Employment

(to start in Oct 2025)	Lecturer ("Lector univeritar") Department of Computer Science, University of Bucharest
Feb 2022 - Sep 2025	Teaching Assistant (*"Asistent universitar"*) Department of Computer Science, University of Bucharest
Jul 2024 - Jul 2025	Research Assistant Institute for Logic and Data Science (ILDS)
Sep 2019 - Aug 2020	Teaching Computer Science School 179, Bucharest

Publications

Journal papers

- *Linear rates of asymptotic regularity for Halpern-type iterations* (with Laurențiu Leuștean), Mathematics of Computation, 94:1323–1333, 2025

- *Rates of asymptotic regularity of the Tikhonov-Mann iteration for families of mappings*, Revue Roumaine de Mathématiques Pures et Appliquées. Special number dedicated to the Tenth Congress of Romanian Mathematicians, 2024

- *Formal definitions and proofs for partial (co) recursive functions* (with David Nowak and Vlad Rusu), Journal of Logical and Algebraic Methods in Programming, 141:100999, 2024

- *On modified Halpern and Tikhonov-Mann iterations* (with Ulrich Kohlenbach and Laurențiu Leuștean), Journal of Optimization Theory and Application 197:233-251, 2023

- *Quadratic rates of asymptotic regularity for the Tikhonov-Mann iteration* (with Laurențiu Leuștean),Optimization Methods and Software, 37:2225-2240, 2022

Preprints

- *Quantitative metastability of the Tikhonov-Mann iteration for countable families of mappings*, arXiv:2406.03429 [math.OC], 2024

Talks

Invited talks

- *International Workshop on Program from Proofs*, Bath, September 14-15, 2025
  `https://t-powell.github.io/pfp/index.html`

- *ESSLLI 2025, Workshop on programs from proofs meets formal mathematics*, Bochum, July 28 - August 1, 2025

- *Computability in Europe, Special Session: "Proof Theory: Pure and Applied"*, Lisbon, July 14-18, 2025
  `https://sites.google.com/view/cie2025-computabilityineurope/`

- *MFO Workshop, Mathematical Logic: Proof Theory, Constructive Mathematics*, Oberwolfach, November 12 - 17, 2023
  `https://www.mfo.de/occasion/2346/www_view`

- *Logic Colloquium 2023, Special Session on Applied Proof Theory*, Milan, June 5-9, 2023
  `https://lc2023.unimi.it`

Contributed conference talks

- *Logic Colloquium 2024*, Göteborg, June 24-28, 2024
  `https://lc2024.se/`

- *Working Formal Methods Symposium (FROM) 2023*, Bucharest, September 21 - 22, 2023
  `https://from2023.cs.unibuc.ro/`

- *The Tenth Congress of Romanian Mathematicians*, Pitești, June 30 - July 5, 2023
  `http://www.imar.ro/~congmatro10/`

- *Workshop for Young Researchers in Mathematics*, Bucharest, May 19-20, 2022
  `https://fmi.univ-ovidius.ro/cercetare/wyrm2022/`

- *Working Formal Methods Symposium*, Timişoara, December 8-9, 2021
  https://from2021.cs.unibuc.ro/

- *Logic Colloquium 2021*, Poznań, July 19-24, 2021
  https://lc2021.pl/

- *Computability in Europe 2021*, Ghent, July 5-9, 2021
  https://www.cie2021.ugent.be/

- *The 22nd annual Graduate Student Conference in Logic*, University of Illinois at Urbana-Champaign, USA, March 20-21, 2021
  https://sites.google.com/view/gsclxxii/

Other selected talks

- *EuroProofNet Tutorial on Usable Formal Methods for Security of Systems*,
  Dresden, March 27-28, 2024
  https://europroofnet.github.io/wg3-dresden24/

- *LOS/IMAR/ILDS Logic Seminar*, Bucharest, October 19, 2023
  https://ilds.ro/logic-seminar/

- *EuroProofNet WG3 Meeting*, Timișoara, February 8-9, 2023
  https://europroofnet.github.io/wg3-timisoara/

- *RV/ILDS/LOS InFormal Workshop on Logics*, January 23, 2023
  https://ilds.ro/2023/01/rv-ilds-los-informal-workshop-on-logics/

Research projects

Jul 2024 - Jul 2025	Member of the research project *Matching Logic, Cryptography and Blockchains* Institute for Logic and Data Science (ILDS) - Pi Squared
Jan 2023 - present	Member of EuroProofNet (European Research Network on Formal Proofs COST action CA20111), Working Group 3: Program verification
Oct 2023 - Dec 2023	Member of the research project *Matching Logic and Lean: The $\mathbb{K}$ Connection*, Institute for Logic and Data Science (ILDS) - Runtime Verification (RV)
Jul 2022 - Jan 2023	Member of the research project *Matching Logic and Lean - Foundations*, Institute for Logic and Data Science (ILDS) - Runtime Verification (RV)

Scientific visits

- University of Bath (invited by Thomas Powell), May 12-16, 2025

- INRIA Lille (invited by Vlad Rusu), June 10 - 15, 2024

- INRIA Lille (invited by Vlad Rusu), September 4 - 10, 2023

Organizing commitees

- Working Formal Methods Symposium (FROM) 2023 (with Nicoleta Dumitru, Ioana Leuştean, Natalia Ozunu, Andrei Sipoş, Traian Şerbănuţă), Bucharest, September 21 - 22, 2023

Edited volumes

- Proceedings of the 9th Symposium on Working Formal Methods (FROM 2025) (with Andrei Arusoaie and Radu Iosif), `https://doi.org/10.48550/arXiv.2509.11877`, 2025

- Proceedings of the 7th Symposium on Working Formal Methods (FROM 2023) (with Laurenţiu Leuştean and Andrei Sipoş), `https://doi.org/10.4204/EPTCS.389`, 2023

Scholarships and awards

- Third prize at the Student Scientific Communications Session of the Faculty of Mathematics and Computer Science, May 26, 2023
  `https://fmi.unibuc.ro/noutati/sesiunea-de-comunicari-stiintifice-studentesti-premii/`

- Second prize at the Student Scientific Communications Session of the Faculty of Mathematics and Computer Science, May 18, 2021
  `https://fmi.unibuc.ro/noutati/sesiunea-de-comunicari-stiintifice-studentesti-premii/`

- Bitdefender research scholarship, March - July 2020
  `https://sla.cs.unibuc.ro/ro/castigatori-burse-si-premii-bitdefender/`

Teaching

- *Logic for Multiagent Systems* lab, Winter Term, 2021/2022, 2022/2023, 2023/2024

- *Operating Systems* lab, Winter Term, 2021/2022, 2022/2023, 2023/2024, 2024/2025

- *Mathematical and Computation Logic* lab, Winter Term 2022/2023, 2023/2024

- *Formal Languages and Automata Theory* seminar, Spring Term, 2021/2022, 2022/2023, 2023/2024

- *Mathematical Logic* seminar, Spring Term, 2021/2022, 2022/2023, 2023/2024

- *Programming Languages Fundamentals* lab, Spring Term, 2021/2022, 2022/2023, 2023/2024

- *Basic tools and techniques in computer science* lab, Winter Term, 2024/2025

- *Functional programming* lab, Winter Term, 2024/2025

Administrative duties

2021 - 2024 Student member of the Council of the Doctoral School of Mathematics, University of Bucharest