



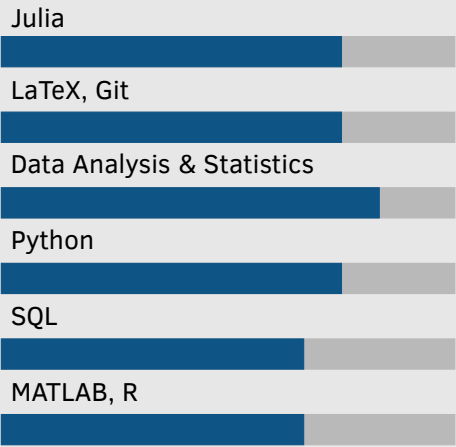
Tomáš Halmazná
PhD Student

- 9 April 2001
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Research Interests

Data-driven methods for parameter estimation and the discovery of dynamical systems from empirical data. My research focuses on numerical optimization algorithms and continuation methods, bridging dynamical systems theory with computational neuroscience. I am highly interested in software development and scientific computing, primarily using the Julia programming language.

Skills



Education

2023–2026	Master of Science in Mathematics Modeling and Computations passed with honours	Masaryk University
2020–2023	Bachelor of Science in Mathematics Modeling and Computations	Masaryk University

Employment

2024–now	Data Analyst	onsemi, Brno
	Data analysis, reporting, process automation, and integration of AI tools	
2022–2023	Data Analyst	Austin Detonator, Vsetín
	Data analysis, reporting and process automation	

Publications

Chaos Links Dendritic Calcium to Bursting in Hippocampal Pyramidal Cells. Pribylova, Lenka and Ševčík, Jan and Halmazna, Tomas and Husa, Stepan and Malarik, Peter and Kajanova, Lucia and Polách, Miroslav and Zapadlo, Stepan and Eclerová, Veronika. Chaos, Solitons & Fractals, accepted for publication in 2025, doi: 10.2139/ssrn.5195195

Teaching

Faculty of Economics and Administration, MU: Mathematics for economists (seminar tutor)

Other pedagogical activities: Organization and leadership of intensive preparatory courses in mathematics

Internship & Mobility

2025, Universitat de Barcelona, Spain:
Erasmus+ study programme. One-semester mobility at the Department of Mathematics and Computer Science, focusing on data science courses.

Languages

English: Fluent, used almost daily

German: Intermediate

Interests

Sport of all kinds, Nature, Hiking, Mountains