



## Štěpán Zapadlo

### Masters Student

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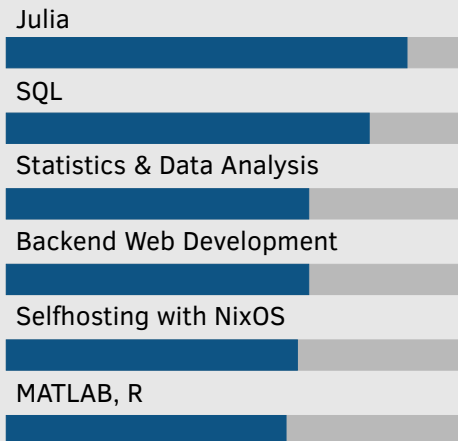
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### Research Interests

Data-driven methods for the discovery of dynamical systems from data capturing real-life phenomena, including, but not limited to, optimization techniques, machine learning and statistical methods. Moreover, I am interested in neuroscience and meteorological models with computations implemented in Julia programming language.

### Skills



### Education

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

### Employment

2024–now	Developer	MAFIL CEITEC, Masaryk University, Brno
2023–now	Automated quality control of MRI images Researcher	Masaryk University, Brno
2021–2024	Nonlinear Dynamics Team Backend Web Developer	oXyShop, Brno
2020–2021	E-commerce platform development Fullstack Web Developer	Freelancer
	Management & planning system for driving school	

### Publications

Phase shifts inside Arnold tongues of weakly coupled oscillators. Jakub Záhurecký, Veronika Eclerová, Jan Ševčík, Štěpán Zapadlo and Lenka Příbylová. Communications in Nonlinear Science and Numerical Simulation. Elsevier B.V., 2025. ISSN 1007-5704. doi: 10.1016/j.cnsns.2025.108729

DSTLS SINDy Optimizer and regression of Hodgkin-Huxley model onto FitzHugh-Nagumo model. Štěpán Zapadlo, Lenka Příbylová. Poster at Julia & Optimization Days 2023, Paris. doi: 10.13140/RG.2.2.13758.46408

### Awards and special events

2023	Award of the Head of Department of Mathematics and Statistics
2019	Participant of the national stage of the Physics Olympiad

### Activities coordination and science popularization

Assisting coordinator of Equadiff 15, Science Festival 2022 & 2023, MjUNI and other various mathematics popularization activities

### Languages

English: C1+/C2, used daily

German: A1/A2

### Interests

Aquascaping, fantasy and selfhosting.