

Born: 25 July 2003

Citizenship: Czech

Email: matous.safranek@gmail.com

Education, Research

- 2022 – today Bachelor's degree program Mathematical modelling at Charles University, Prague.
- 2024 Learning & research semester at Universität Konstanz under Mateusz Michałek with DAAD scholarship, studying tensors. Co-authored an article “Exact values of generic subrank”¹, currently under review.
- 2023 Student Faculty Grant: “FDTD Simulation of optical nanostructures”.
- Implementation of a Finite-difference time-domain simulation (1D and 2D) of electromagnetic waves in Python. Optimization for GPU with PyTorch. Data processing using Fourier analysis.

Awards

- 2021, 2022 International Mathematical Olympiad gold medal (10th place) & silver medal
- 2022 International Linguistics Olympiad silver medal

Other Activities

- 2024 Programmer of a mobile game Timelike² developed in Godot & GDScript.
- 2022 – today Co-organizer of a correspondence math competition for high school students MKS³.
- Marking solutions, reviewing official solutions.
- Co-authored an introductory text to analytic geometry⁴ (in Czech).
- Co-organized 2 camps: Gave lectures, organized mathematical & other games.

¹<https://arxiv.org/abs/2408.07550>

²<https://timelike.eu>

³<http://mks.mff.cuni.cz>

⁴<https://prase.cz/archive/43/serial.pdf>