David Sychrovský

✉ sychrovsky@kam.mff.cuni.cz   🌐 https://kam.mff.cuni.cz/~sychrovsky/

About Me

I am a PhD student at the Department of Applied Mathematics of Faculty of Mathematics and Physics, Charles University. My research interests include deep reinforcement learning, game theory and combination of the two. My supervisor is prof. Martin Loebl.

Education

2020 – *Now*	▌	**Ph.D. in Computer Science** at Charles University Focus: *Learning in Games*.
2018 – 2020	▌	**M.Sc. in Theoretical Physics** at Charles University Thesis title: *Study of geodesic chaos by fractal methods*.
2015 – 2018	▌	**Bc. in Physics** at Charles University Thesis title: *Comparison of Brill waves with the fields of singular rings*.

Research Publications

Conference Proceedings

1 D. Sychrovský, M. Šustr, E. Davoodi, M. Bowling, M. Lanctot, and M. Schmid, "Learning not to regret," in *Proceedings of the The 38th Annual AAAI Conference on Artificial Intelligence (AAAI)*, 2024.

2 F. Úradník, D. Sychrovský, J. Černý, and M. Černý, "Reducing optimism bias in incomplete cooperative games," in *Proceedings of the 23nd International Conference on Autonomous Agents and Multiagent Systems. (IFAAMAS)*, 2024.

3 D. Sychrovský, J. Černý, S. Lichau, and M. Loebl, "Price of anarchy in a double-sided critical goods distribution system," in *Proceedings of the 22nd International Conference on Autonomous Agents and Multiagent Systems. (IFAAMAS)*, 2023. 🔗 URL: https://arxiv.org/abs/2302.09959.

4 D. Sychrovský, S. Desai, and M. Loebl, "Rule enforcing through ordering," in *The 14th Conference on Decision and Game Theory for Security, (GameSec)*, 2023. 🔗 URL: https://arxiv.org/abs/2303.17971.

Skills

Languages	▌	Czech (native), English (C1), German (B1).
Coding	▌	Python, LaTeX.

Students

2024	▌	**Bc. Filip Úradník** Thesis title: Balancing Space Complexity and Ambiguity in Superadditive Set Functions

Miscellaneous Experience

Awards and Achievements

2023 ◾ **Prize of Jirka Matoušek**, For outstanding publication [3].

Stays Abroad

2024 ◾ **University of Alberta**, A six month long internship at the University of Alberta under the supervision of prof. Michael Bowling.

2022 ◾ **DIMACS REU**, A two month research stay at the Rutgers University.

◾ **4EU+ Summer School on Artificial Intelligence**, A week long summer school organised by the University of Milan.