

# Julian Skirzyński

CURRICULUM VITAE — DECEMBER 2024

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|--------------------|---|---|
| EDUCATION          | <p><b>University of California, San Diego, USA</b><br/><i>PhD in Computer Science &amp; Engineering</i><br/>Advisor: Berk Ustun</p> <p><b>McGill University, Canada</b><br/><i>M.Sc. in Computer Science</i><br/>Thesis: <a href="#">Language-Conditional Imitation Learning</a><br/>Advisor: David Meger</p> <p><b>University of Warsaw, Poland</b><br/><i>M.Sc. in Cognitive Science</i><br/><i>B.Sc. in Cognitive Science, Mathematics</i><br/>Advisors: Andrzej Skowron (Mathematics); Piotr Wasilewski (Cognitive Science)</p>   | <p>2022 – PRESENT</p> <p>2017 – 2020</p> <p>2012 – 2018</p>   |
| RESEARCH INTERESTS | <p><b>Areas:</b> Machine Learning, Decision-Making, Computational Cognitive Science, Reinforcement Learning</p> <p><b>Topics:</b> Improving Decision-Making, Interpretability, Heuristics, Human-in-the-Loop</p>  |   |
| AWARDS & HONORS    | <p>Pierre Arbour Foundation Scholarship, McGill University</p> <p>Graduate Excellence Award, McGill University</p> <p>Scholarship for Exchange at McGill University, University of Warsaw</p> <p>Best Students Scholarship, University of Warsaw</p>  | <p>2018 – 2019</p> <p>2018</p> <p>2015</p> <p>2014 – 2017</p> |
| ACADEMIC POSITIONS | <p><b>Max Planck Institute for Intelligent Systems, Tübingen, Germany</b><br/><i>Researcher</i></p> <p>Led project on discovering human-interpretable descriptions of reinforcement learning policies that are suitable for teaching people optimal strategies for solving problems.</p> <p>Advisor: Falk Lieder</p>  | <p>2019 – 2023</p>  |
| PAPERS             | <p>[1] <a href="#">Automatic Discovery and Description of Human Planning Strategies</a><br/>Julian Skirzyński, Yash Raj Jain, Falk Lieder<br/><i>Behavior Research Methods</i>, 2023</p> <p>[2] <a href="#">Boosting Human Decision-making with AI-Generated Decision Aids</a><br/>Frederic Becker*, Julian Skirzyński*, Bas van Opheusden, Falk Lieder<br/><i>Computational Brain &amp; Behavior</i>, 2022</p> <p>[3] <a href="#">Automatic Discovery of Interpretable Planning Strategies</a><br/>Julian Skirzyński, Frederic Becker, Falk Lieder<br/><i>Machine Learning</i>, 2021</p> <p>[4] <a href="#">Object [Re] Cognition with Similarity</a><br/>Łukasz Sosnowski, Julian Skirzyński<br/><i>International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems</i>, 2018</p> <p>[5] <a href="#">A Framework for Analysis of Granular Neural Networks</a><br/>Julian Skirzyński<br/><i>International Joint Conference on Rough Sets</i>, 2017</p> |   |
| PREPRINTS          | <p>[6] <a href="#">Interpretability Does not Lead to Better Decisions</a></p>   |   |

Julian Skirzyński, Elena Glassman, Berk Ustun  
*In Submission, 2024*

[7] [Counterfactual Explanations Cannot Help Auditing Model Fairness](#)

Julian Skirzyński, Davind Danks, Berk Ustun  
*In Submission, 2024*

REFEREED  
WORKSHOP  
PAPERS

[8] [On Interpretability and Overreliance](#)

Julian Skirzyński, Elena Glassman, Berk Ustun  
*Interpretable AI: Past, Present and Future, NeurIPS Workshop, 2024*

[9] [Language-Conditional Imitation Learning](#)

Julian Skirzyński, Bobak Baghi, David Meger  
*Visually Grounded Interaction and Language, NAACL Workshop, 2021*

POSTERS

[10] [Encouraging far-sightedness with automatically generated descriptions of optimal planning strategies](#)

Frederic Becker, Julian Skirzyński, Bas van Opheusden, Falk Lieder  
*Proceedings of the Annual Meeting of the Cognitive Science Society, 2021*

[11] [Flexible Strategy Use in Soar's Tic-Tac-Toe](#)

Julian Skirzyński, Piotr Wasilewski  
*Proceedings of the Annual Meeting of the Cognitive Science Society, 2020*

[12] [Flexible Strategy Use in ACT-R's Tic-Tac-Toe](#)

Julian Skirzyński, Piotr Wasilewski  
*Proceedings of the Annual Meeting of the Cognitive Science Society, 2019*

TEACHING

DSC291 – Interpretability & Explainability in Machine Learning 2023  
*Teaching Assistant: Co-designed class curriculum and contributed to instruction periodically*

INDUSTRY  
POSITIONS

**Grantino**, Warsaw, Poland 2024 – PRESENT  
*Grant Writing Contractor*  
Grant writing on IT-related R&D projects funded by the European Union (NCBiR, PARP) for selected partners

**Educational Entertainment One**, Warsaw, Poland 2021 – 2024  
*Lead Technical Architect*  
Designed algorithms (AI, NLP) and supported the production process for a story-driven mobile game for learning English.

ACADEMIC  
SERVICE

JOURNAL REVIEWING  
Machine Learning 2022

CONFERENCE PROGRAM COMMITTEE

NeurIPS – Annual Conference on Neural Information Processing Systems 2023 – 2024  
ICLR – International Conference on Learning Representations 2024  
FAccT – ACM Conference on Fairness, Accountability and Transparency 2022 – 2023  
ICML Workshop RL4RealLife – International Conference on Machine Learning 2021  
IPMU – Information Processing and Management of Uncertainty in Knowledge-Based Systems 2018

SOFTWARE



[InterpretableStrategyDiscovery](#) – find decision trees describing RL policies  
[InterpretableHumanPlanning](#) – find strategies used by people in planning

PERSONAL

**Language Skills :** Fluent in Polish, English, Intermediate in German

**Software Skills :** C++, Python, R, Lisp, Java, Pytorch, Jira

**Interests :** Music collecting, Soccer, Groundhopping, Travel, Cultures of the world, Fantasy

**Other :** Peer tutoring, Co-author of “Triozy polskie”, a textbook for learning Polish by foreigners