

Julian Skirzyński

CURRICULUM VITAE — MAY 2022

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EDUCATION	<p>University of California, San Diego, San Diego, CA 2022 – PRESENT <i>PhD in Computer Science & Engineering</i> Advisor: Berk Ustun Research Interests: Interpretable AI, Computational Cognitive Science, Decision-Making, Reinforcement Learning, Machine Learning</p> <p>McGill University, Montreal, QC 2017 – 2020 <i>M.Sc. in Computer Science</i> Thesis: Language-Conditional Imitation Learning Advisor: David Meger</p> <p>University of Warsaw, Warsaw, Poland 2012 – 2018 <i>M.Sc. in Cognitive Science</i> <i>B.Sc. in Cognitive Science, Mathematics</i> Advisors: Andrzej Skowron (Mathematics); Piotr Wasilewski (Cognitive Science)</p>
AWARDS & HONORS	<p>Pierre Arbour Foundation Scholarship, McGill University 2018 – 2019 Graduate Excellence Award, McGill University 2018 Scholarship for Exchange at McGill University, University of Warsaw 2015 Best Students Scholarship, University of Warsaw 2014 – 2017</p>
RESEARCH & INDUSTRY	<p>Educational Entertainment One, Warsaw, Poland 2021 – PRESENT <i>AI Designer</i> Design algorithms that control the working of a mobile, narrative-driven game for learning English.</p> <p>Max Planck Institute for Intelligent Systems, Tübingen, Germany 2019 – PRESENT <i>Researcher</i> Led project on discovering human-interpretable descriptions of reinforcement learning policies that are suitable for teaching people optimal strategies for solving problems.</p>
PAPERS	<p>[1] Automatic discovery of interpretable planning strategies Julian Skirzyński, Frederic Becker, Falk Lieder <i>Machine Learning</i>, 2021</p> <p>[2] Object [Re] Cognition with Similarity Łukasz Sosnowski, Julian Skirzyński <i>International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems</i>, 2018</p> <p>[3] A Framework for Analysis of Granular Neural Networks Julian Skirzyński <i>International Joint Conference on Rough Sets</i>, 2017</p>
REFEREED WORKSHOP PAPERS	<p>[4] Language-Conditional Imitation Learning Julian Skirzyński, Bobak Baghi, David Meger <i>Visually Grounded Interaction and Language, NAACL Workshop</i>, 2021</p>
POSTERS	<p>[5] Encouraging far-sightedness with automatically generated descriptions of optimal planning strategies Frederic Becker, Julian Skirzyński, Bas van Opheusden, Falk Lieder <i>Proceedings of the Annual Meeting of the Cognitive Science Society</i>, 2021</p>

- [6] [Flexible Strategy Use in Soar's Tic-Tac-Toe](#)
 Julian Skirzyński, Piotr Wasilewski
Proceedings of the Annual Meeting of the Cognitive Science Society, 2020
- [7] [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

PREPRINTS

- [8] [Boosting human decision-making with AI-generated decision aids](#)
 Frederic Becker*, Julian Skirzyński*, Bas van Opheusden, Falk Lieder
Manuscript in submission, 2022
- [9] [Automatic discovery and description of human planning strategies](#)
 Julian Skirzyński, Yash Raj Jain, Falk Lieder
Manuscript in submission, 2022

*JOINT FIRST
AUTHORSHIP

ACADEMIC SERVICE

JOURNAL REVIEWING
 Machine Learning

CONFERENCE PROGRAM COMMITTEE

FACCT – ACM Conference on Fairness, Accountability and Transparency	2022
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