Julian Skirzyński

Curriculum Vitae — July 2025

jskirzynski@ucsd.edu www.jskirzynski.com

EDUCATION

University of California, San Diego

2022 - Present

Ph.D. Candidate in Computer Science & Engineering

Thesis: Foundations of Human AI Interaction

Advisor: Berk Ustun

McGill University

2017 - 2020

M.S. in Computer Science

Thesis: Language-Conditional Imitation Learning

Advisor: David Meger

University of Warsaw

2012 - 2018

M.S. in Cognitive Science

B.S. in Mathematics, Cognitive Science Advisors: Andrzej Skowron; Piotr Wasilewski

Academic

Max Planck Institute for Intelligent Systems, Germany

2019 - 2023

Positions Research Scientist

Projects: Interpretable RL Policies, Improving Human Planning, Discovering Human Planning Strategies

Advisor: Falk Lieder

Research

Areas: Machine Learning, Cognitive Science, Human-Computer Interaction

Interests

Topics: Decision-Making, Interpretability, Explainability, Reinforcement Learning, Experimental Design

Applications: Social Sciences, Medicine, Consumer Finance, Criminal Justice

Awards & Honors

Pierre Arbour Foundation Scholarship

2018-2019

McGill University Graduate Excellence Award McGill - University of Warsaw Exchange Scholarship University of Warsaw Academic Excellence Scholarship

2015 2014 - 2017

2018

PREPRINTS

. How Much Content Do LLMs Generate That Induces Cognitive Bias in Users?

Abeer Alessa, Akshaya Lakshminarasimhan, Param Somane, **Julian Skirzyński**, Julian McAuley, Jessica Echterhoff *In Submission*, 2025

2. On the Value of Interpretability in Human Decision-Making

Julian Skirzyński, Elena Glassman, Berk Ustun

In Submission, 2025

PAPERS

3. <u>Discrimination Exposed? On the Reliability of Explanations for Discrimination Detection</u>

*EQUAL CONTRIBUTION Julian Skirzyński, David Danks, Berk Ustun

ACM Conference on Fairness, Accountability, and Transparency, 2025

G Google Scholar

Automatic Discovery and Description of Human Planning Strategies

Julian Skirzyński, Yash Raj Jain, Falk Lieder

Behavior Research Methods, 2023

5. Boosting Human Decision-making with AI-Generated Decision Aids

Frederic Becker*, Julian Skirzyński*, Bas van Opheusden, Falk Lieder

Computational Brain & Behavior, 2022

6. Automatic Discovery of Interpretable Planning Strategies

Julian Skirzyński, Frederic Becker, Falk Lieder

Machine Learning, 2021

7. Object [Re] Cognition with Similarity

Łukasz Sosnowski, Julian Skirzyński

International Conference on Information Processing and Management of Uncertainty in Knowledge-Based Systems, 2018

8. A Framework for Analysis of Granular Neural Networks

Julian Skirzyński

International Joint Conference on Rough Sets, 2017

Refereed

Workshop 9. Papers

On Interpretability and Overreliance

Julian Skirzyński, Elena Glassman, Berk Ustun

Interpretable AI: Past, Present and Future, NeurIPS Workshop, 2024

10. Language-Conditional Imitation Learning

Julian Skirzyński, Bobak Baghi, David Meger

Visually Grounded Interaction and Language, NAACL Workshop, 2021

TEACHING

UCSD Halıcıoğlu Data Science Institute

2023

DSC291 - Interpretability & Explainability in Machine Learning

Guest Lecturer & Teaching Assistant

Co-designed curriculum and held weekly office hours for serving 20+ PhD/MS students. Delivered guest lectures on ML interpretability methods and cognitive biases in AI-assisted decision-making. Completed teaching development workshop on graduate-level instruction.

Software

GitHub

<u>Strategy Extraction from RL Policies</u> – Algorithm to extract interpretable decision trees from RL policies <u>Human Planning Strategy Analysis</u> – Framework for identifying strategies used in human planning tasks

Selected

Educational Entertainment One, Warsaw, Poland

2021 - 2024

Industry L

Lead Technical Architect

Positions

Designed algorithms (AI, NLP) and supported the production process for a story-driven mobile game for learning English.

Academic

JOURNAL REVIEWING

Service

Machine Learning

2022

Conference Program Committee

NeurIPS – Conference on Neural Information Processing Systems

ICML – International Conference on Machine Learning

ICLR – International Conference on Learning Representations

FAccT – ACM Conference on Fairness, Accountability and Transparency

ICML Workshop RL4RealLife – International Conference on Machine Learning

1022 – Present ICML Workshop RL4RealLife – International Conference on Machine Learning

1021 IPMU – Information Processing and Management of Uncertainty in Knowledge-Based Systems

Personal

Language Skills: English, Polish, German (Conversational)

Software Skills: Python, R, C++, Flask, AWS, PyTorch, CPLEX, JavaScript, Jira Interests: Soccer, Groundhopping, Traveling, Fantasy Literature, Record Collecting

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