Marko Tešić

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Research Experience

Research Associate at Leverhulme Centre for the Future of Intelligence, Uni-July 2023 - Present versity of Cambridge · Working on evaluating AI cognitive capabilities by adapting physiological behavioral tests and the methods from psychometrics. • As part of the OECD expert group provided scientific advice on the Future of work and progress of AI. • Managing a team of researchers working estimating the impact of AI and the human workforce. Royal Academy of Engineering UK IC Postdoctoral Research Fellow at Mar. 2021 - Feb. 2023 Birkbeck, University of London • Led a project on understanding the impact of AI explanations on human belifs and decision-making. · Worked with and presented work to the members of the UK, the US and Australian intelligences communities. • Organised a workshop Workshop on Human Behavioral Aspects of (X)AI bringing together cognitive scientist and ML researchers from academia, industry and government working on and with (explainable) AI. **Researcher** on The Bayesian Approach to Robust Argumentation Machines project Sep. 2021 – Feb. 2023 at MCMP, LMU, Munich & Birkbeck, University of London • Automated argument generation and evaluation from Bayesian network models. Data Study Group (DSG) Principal Investigator at the Alan Turing Institute Oct. 2022 - April 2023 • Led the scoping and execution of a data science challenge with the UK Department for Transport, supervising participants and ensuring high-quality solutions and reporting. Research Intern at BlackRock, Factor Based Strategies Group Oct. 2019 - Mar. 2020 • Developed causal Bayesian models of investment factors and ESG criteria. Member of the Translation Team UK on the project Bayesian Argumentation Oct. 2017 - Nov. 2018 via Delphi (BARD) within IARPA at Birkbeck, University of London & UCL Created intelligence gathering-inspired situations • Built Bayesian network models of these situations • Fully designed, ran, and analyzed experiments testing people's evidential, causal, and probabilistic reasoning

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Education	
Ph.D. in Psychology	2020
Department of Psychological Sciences, Birkbeck, University of London, UK	
Thesis: Explanation and Argument	
Focus: causal-probabilistic reasoning, Bayesian networks, psychology of explanations	
Supervisors: Ulrike Hahn and David Lagnado	
M.A. in Logic and Philosophy of Science	2016
Munich Center for Mathematical Philosophy, Ludwig Maximilian University, Munich, Germany	
B.A. in Philosophy	2014
University of Belgrade, Serbia	

Marko Tešić Curriculum Vitae

Selected Work

• Marko Tešić*, John Burden*, Lorenzo Pacchiardi*, José Hernández-Orallo (2025). Paradigms of AI Evaluation: Mapping Goals, Methodologies and Culture. *Preprint*

- Marko Tešić*, Lorenzo Pacchiardi*, Lucy Cheke, José Hernández-Orallo (2024). Leaving the barn door open for Clever Hans: Simple features predict LLM benchmark answers. *Preprint*
- Matteo Gabriel Mecattaf*, Ben Slater*, **Marko Tešić**, Jonathan Prunty, Konstantinos Voudouris, Lucy Cheke (2024). A little less conversation, a little more action, please: Investigating the physical common-sense of LLMs in a 3D embodied environment. *Preprint*
- Rakshit S. Trivedi et al. (2024). Melting Pot Contest: Charting the Future of Generalized Cooperative Intelligence. NeurIPS 2024 Track on Datasets and Benchmarks.
- Marko Tešić, & Janet Slesinski (2024). Benchmark Design Criteria for Mathematical Reasoning in LLMs. Center for Curriculum Redesign.
- Marko Tešić & Ulrike Hahn (2023). The impact of explanations as communicative acts on belief in a claim: The role of source reliability. *Cognition*, 240(105586).
- Ulrike Hahn & **Marko Tešić** (2023). Argument and Explanation. *Philosophical Transactions of the Royal Society A, 381*(2251). Theme issue on *Cognitive Artificial Intelligence.*
- Marko Tešić & Ulrike Hahn (2022). Can counterfactual explanations of AI systems' predictions skew lay users' causal intuitions about the world? If so, can we correct for that? *Patterns*, *3*(12).
- Marko Tešić (2021). On the transferability of insights from the psychology of explanation to explainable AI. Human Centered AI workshop at NeurIPS 2021.
- Marko Tešić & Ulrike Hahn (2021). Explanation in AI systems. In S. Muggleton & N. Chater (Eds.), *Human-Like Machine Intelligence* (pp. 114–136). Oxford University Press.
- Marko Tešić*, Alice Liefgreen*, & David Lagnado (2020). The propensity interpretation of probability and diagnostic split in explaining away. *Cognitive Psychology*, 121.
- Nicole Cruz, Saoirse Desai, Stephen Dewitt, Ulrike Hahn, David Lagnado, Alice Liefgreen, Kirsty Phillips, Toby Pilditch & **Marko Tešić** (2020). Widening access to Bayesian problem solving. *Frontiers in Psychology*, 11, 660.
- Alice Liefgreen*, Marko Tešić*, & David Lagnado (2018). Explaining away: Significance of priors, diagnostic reasoning, and structural complexity. In T. T. Rogers, M. Rau, X. Zhu, & C. W. Kalish (Eds.), *Proceedings of the 40th Annual Meeting of the Cognitive Science Society* (pp. 2047–2052). Austin, TX: Cognitive Science Society. * equal contribution; Full list of publications available via Google Scholar.

Selected Presentations

Robust evaluation of Generative AI. I presented a tutorial on evaluating large language models *June 20, 2024* at the European Association for Data Science summer school on generative AI.

AAAI-24 tutorial: Measurement Layouts for Capability-Oriented AI Evaluation. I co- *Feb. 20, 2024* organized a tutorial on Bayesian hierarchical models for learning the AI capability and presented my work on inferring LLM capabilities.

Supervision and Teaching

Managing a Postdoc and Research Assistant on an Accenture-backed project assessing Jan. 2024 – Present AI's core cognitive capabilities for workplace tasks. CFI, University of Cambridge

Visiting Lecturer for the M.A. courses *Computational Approaches to Mind* and *Fundamen-Jan. 2023 – Apr. 2023 tal Debates in Cognitive Science*. Department of Psychological Sciences, Birkbeck, University of London

Visiting Lecturer for the M.A. course *Cognitive and Economic Science of Rational Choice. Oct. 2020 – Dec. 2020* Department of Psychology and Economics, City, University of London

Honors and Awards

The Alan Turing Institute Post-Doctoral Enrichment Award

July 2022 - Jan. 2023

The Royal Academy of Engineering UK IC Postdoctoral Research Fellowship (£200,000)

Mar. 2021 – Feb. 2023

Ph.D. studentship (IARPA & Birkbeck, University of London)

2017 - 2020

Dositeja scholarship for graduate studies

2017/18; 2015/16; 2014/15

BAYHOST scholarship for graduate studies

2015/16; 2014/15