Oliver Buchholz

CONTACT INFORMATION

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Research Interests

AOS Philosophy of Science, Philosophy of Machine Learning

EDUCATION

Nov 2020 - Present Ph. D. in Philosophy

University of Tübingen, Germany

Advisors: Prof. Dr. Wolfgang Spohn and Dr. Eric Raidl

OCT 2018 - OCT 2020 M. A. in PHILOSOPHY

University of Tübingen, Germany

Thesis: "Artificial Neural Networks and the Reference Class Problem"

Advisor: Jun.-Prof. Dr. Alexandra Zinke

OCT 2018 - OCT 2020 M. Sc. in Economics and Finance

University of Tübingen, Germany

Thesis: "Uncertainty and the Business Cycle"

Advisor: Prof. Dr. Thomas Dimpfl

Oct 2016 – Aug 2017 B. Sc. in Mathematics (non degree-seeking)

University of Stuttgart, Germany

Undergraduate coursework in analysis, linear algebra, numerics and stochastics

Oct 2012 – Jul 2016 B. Sc. in Economics and Business Administration

University of Hohenheim, Stuttgart, Germany

Thesis: "Forecasting Emergency Patient Arrival Counts"

Advisor: Prof. Dr. Robert Jung

ACADEMIC POSITIONS

Nov 2020 - Present Research Assistant, Cluster of Excellence "Machine Learning: New Perspec-

tives for Science", University of Tübingen

OCT 2021 - FEB 2022 TEMPORARY LECTURER (Lehrbeauftragter), University of Stuttgart

OCT 2018 – SEP 2021 RESEARCH ASSISTANT, Chair of Procurement and Production,

OCT 2012 – Aug 2017 University of Hohenheim

OCT 2016 - Aug 2017 Student Assistant, Chair of Econometrics and Statistics,

University of Hohenheim

AWARDS AND SCHOLARSHIPS

- Nov 2012 Oct 2020 Scholar of the German National Academic Foundation (Studienstiftung des deutschen Volkes)
 - OCT 2015 Admission to the Dean's List of the Faculty for Economics and Social Sciences at the University of Hohenheim for grades among the best 3 % of the faculty's students

Grants

- OCT 2022 Funding by the Cluster of Excellence "Machine Learning: New Perspectives for Science" for the Graduate Workshop on Philosophy of Machine Learning (EUR 2.000).
- Nov 2021 Fellowship to attend the ACM International Conference on AI in Finance (USD 100).

Talks

- 12. "The Curve-Fitting Problem Revisited", 4th International Conference of the German Society for Philosophy of Science, Berlin, August 2022.*
- 11. "Building Effective Guidelines for Machine Learning: Lessons from Means-End Epistemology", conference "Philosophy of Data Science: Data Science Governance", Frankfurt a. M., June 2022.*
- 10. "XAI: On Explainability and the Obligation to Explain" (with K. Reinhardt), workshop "Issues in XAI #4: Explainable AI: Between Ethics and Epistemology", Delft, May 2022.*
- 9. "The Curve-Fitting Problem Revisited", conference "Formal Methods and Science in Philosophy IV", Dubrovnik, April 2022.*
- 8. "A Means-End Account of Explainable Artificial Intelligence", conference "Philosophy in Informatics VI", virtual, December 2021.*
- 7. "A Means-End Account of Explainable Artificial Intelligence", workshop "Philosophy of Science Meets Machine Learning", Tübingen, November 2021.
- 6. "Building Effective Guidelines for XAI: Lessons from Philosophy", workshop on Explainable AI in Finance at the 2nd ACM International Conference on AI in Finance, virtual, November 2021.*
- 5. "The Deep Neural Network Approach to the Reference Class Problem", workshop "Philosophy of Science in the Light of AI", virtual, October 2021.*
- 4. "A Means-End Account of Explainable Artificial Intelligence", 4th Conference on "Philosophy and Theory of Artificial Intelligence", Gothenburg, September 2021.*
- 3. "A Falsificationist Account of Artificial Neural Networks" (with E. Raidl), Congress of the Society for the Philosophy of Science, Mons, September 2021 (not held due to Covid-19).*
- 2. "A Falsificationist Account of Artificial Neural Networks", CEPE/IACAP joint conference, virtual, July 2021.*
- 1. "A Falsificationist Account of Artificial Neural Networks", Philosophy of Science & Methodology Colloquium, Tübingen, June 2021.

^{*} peer-reviewed

REVIEWING ACTIVITIES

 ${\tt Conferences} \quad \textit{Philosophy and Theory of Artificial Intelligence}$

CONFERENCE AND WORKSHOP ORGANIZATION

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m Oct}\ 2022$ Graduate Workshop on Philosophy of Machine Learning (with S. Blanco), University of Tübingen.

Teaching

Winter 2021/22 "Philosophische Aspekte des maschinellen Lernens", undergraduate seminar (in German), University of Stuttgart.

last updated: March 13, 2022