Oliver Buchholz

Contact Information

Address	AI Research Building, Maria-von-Linden-Straße 6, 72076 Tübingen, Germany
Email	oliver.buchholz@uni-tuebingen.de
Website	`oliverbuchholz.github.io`

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 Perspectives for Science", University of Tübingen
Oct 2021 – Feb 2022	Temporary Lecturer (Lehrbeauftragter), University of Stuttgart
Oct 2018 – Sep 2021 and Oct 2012 – Aug 2017	Research Assistant, Chair of Procurement and Production, 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

13. "How to Use Explainable AI Responsibly" (with K. Reinhardt), Conference on Engaging Ethics and Epistemology in Science, Hannover, September 2022.*
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

Conferences	*GAP.11*, *Philosophy and Theory of Artificial Intelligence*

Conference and Workshop Organization

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 22, 2022