

# Oliver Buchholz

## CONTACT INFORMATION

---

ADDRESS AI Research Building, Maria-von-Linden-Straße 6, 72076 Tübingen, Germany

EMAIL [oliver.buchholz@uni-tuebingen.de](mailto:oliver.buchholz@uni-tuebingen.de)

WEBSITE [oliverbuchholz.github.io](https://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

---

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    *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.