Curriculum Vitae

Oliver Schacht

Doctorate Machine Learning and Statistics, University of Hamburg

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Personal Details

Birth Date and Place: June 18th, 1996 in Hamburg, Germany

Education

10/2021 -	Ph.D. in Statistics and Machine Learning, University of Hamburg, Faculty of Business Administration, Institute of Statistics - Advisor: Prof. Dr. Martin Spindler - Dissertation (Working Title): Topics in Causal Machine Learning
08/2023 – 12/2023	Visiting Student, UC San Diego, Halıcıoğlu Data Science Institute - Inviting Professor: Prof. Dr. Biwei Huang - Research on Causal Machine Learning and Causal Reinforcement Learning
10/2018 – 10/2021	M. Sc. Industrial Engineering and Management, University of Hamburg, Faculty of Business Administration Final Grade: Very Good (1.11/1.0, GPA 3.89) - Major Interests: Information Technology, Data Science, Machine Learning - Master Thesis: Causal Reinforcement Learning – Theory and Applications, Grade: Very Good (1.0/1.0)
08/2019 – 12/2019	Visiting Student, San Diego State University, Fowler College of Business
10/2015 – 10/2018	B. Sc. Industrial Engineering and Management, University of Hamburg, Faculty of Business Administration Final Grade: Very Good (1.35/1.0) - Bachelor Thesis: Implementation of L_2-Boosting in Rcpp, Grade: Very Good (1.0/1.0)
06/2014	Abitur (A-Level) Final Grade: Very Good (1.0/1.0, best of the year)

Professional Experience

10/2021-04/2023	Research Assistant (University of Hamburg) - Researching in the fields of Causal Machine Learning, Double Machine Learning and Causal Reinforcement Learning

10/2021-04/2023	Research Assistant (Economic AI GmbH) - Researching in the fields of Reinforcement Learning, Causality, Double Machine Learning - Data Science projects with industry partners
05/2020 – 09/2021	Student Assistant, University of Hamburg, Hamburg Business School, Department of Statistics - Simulation Studies in "Kueck, J., Luo, Y., Spindler, M., Wang, Z. (2022): *Estimation and Inference of Treatment Effects with L2-Boosting in High-Dimensional Settings* (Journal of Econometrics)" - Simulation Study and Empirical Application in "Chernozhukov, V., Klaassen, S., Kueck, J., Spindler, M. (2022): *Uniform Inference in High Dimensional Gaussian Graphical Models* (Biometrika)"
10/2016 – 07/2019	Teaching Assistant, University of Applied Science Hamburg, Department of Industrial Engineering - Tutorials in the fields of Mathematics, Statistics and Programming

Publications

Schacht, O., Klaassen, S., Schwarz, P., Spindler, M., Grünbaum, D., Imhof, S. (2023): *Causally learning an optimal rework policy*. Proceedings of the KDD'23 Workshop on Causal Discovery, Prediction and Decision (PMLR).

Bach, P., Schacht, O., Chernozhukov, V., Klaassen, S., Spindler, M. (2024): *Hyperparameter Tuning for Causal Inference with Double Machine Learning: A Simulation Study*. Proceedings of the Third Conference on Causal Learning and Reasoning (PMLR).

Work in Progress

Double Reinforcement Learning - Methods and Applications (with Martin Spindler and Sven Klaassen)

Automated Causal Machine Learning: A Simulation Study (with Martin Spindler and Philipp Bach)

Multi-horizon Spatio-temporal Inland Waterway Freight Demand Forecasting with Dynamic Graph Attention-based Multi Attention Model (with Lingyu Zhang)

Conferences

11/2023	Causal Data Science Meeting, online. Talk: *Causally Learning an Optimal Rework Policy.*
08/2023	The KDD'23 Workshop on Causal Discovery, Prediction and Decision, Long Beach. Talk: *Causally Learning an Optimal Rework Policy.*
03/2023	YES! Causal Inference Workshop, University of Technology Eindhoven. Poster: *Double/Debiased Machine Learning - Insights from an extensive simulations study.*
11/2022	Causal Data Science Meeting, online. Talk: *So many choices in Double Machine Learning!? Practical insights from a simulations study*

Teaching Experience

Fall 2023	Statistical Programming in python (tutorial), Statistics I (tutorial)
Spring 2023	Intro to Causal Inference and Digital Causality Lab (tutorial), Statistics II
Fall 2022	Introduction to Deep Learning (tutorial), Digital Causality Lab (tutorial)
Spring 2022	Causal Inference – An Introduction (tutorial)
Fall 2021	Causal Machine Learning (seminary)
Spring 2019	Statistics II (tutorial), Mathematics II (tutorial)
Fall 2018	Statistics I (tutorial), Mathematics I (tutorial)
Spring 2018	Control Theory (tutorial), Mathematics II (tutorial)
Fall 2017	Mathematics I (tutorial), Programming in C (tutorial)

Affiliations

10/2021 -	Member of Hamburg Center for Health Economic (HCHE)

Summer Schools

06/2023	Northern Probabilistic AI School, Trondheim, Norway
07/2022	Eastern European Machine Learning Summer School, Vilnius, Lithuania
06/2022	MLSS^N Machine Learning Summer School, Krakow, Poland

Awards and Scholarships

06/2023 –	Ph.D. scholarship at the German Academic Scholarship Foundation (Studienstiftung des deutschen Volkes)
06/2019	Award for social commitment at the university
11/2017 – 10/2021	Scholarship at the German Academic Scholarship Foundation (Studienstiftung des deutschen Volkes)

Volunteering

06/2022 -	Friends of St. Anne's Hospital, Tanzania
02/2016 -	Youth Press Association Hamburg (jphh e.V.)
10/2016 – 09/2021	Student Council of the Department of Industrial Engineering
10/2015 – 10/2020	Student Representative in the Examination Board of the Department of Industrial Engineering