Jun Wu
Curriculum Vitae

Freisinger Landstrasse 86
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✉ *wujun3544@gmail.com*

Education

10/2019 – 09/2023	**Dr. rer. nat.**, *supervised by Prof. Mathias Drton*
	Statistics Research Group, Technical University of Munich, Germany
	○ Dissertation "Homoscedasticity and feedback loops in graphical models"
	○ Data Science program, TUM Executive & Professional Education, 06/2022 - 07/2022
	○ Github: https://github.com/wjmoss
09/2016 – 01/2019	**M.Sc. in Mathematics**
	ETH Zurich, Switzerland
	○ Specialization in statistics
09/2012 – 07/2016	**B.Sc. in Mathematics and Applied Mathematics**
	Zhejiang University, China

Professional Experience

10/2019 – 09/2023	**Research Assistant and Teaching Assistant**
	Statistics Research Group, Technical University of Munich, Germany
	○ Member of the European Research Council Grant team for the project "Graphical Models for Complex Multivariate Data" (ID 883818)
11/2018 – 12/2018	**Hilfassistent**
	Seminar for Statistics, ETH Zurich, Switzerland

Publications and Preprints

○ Structure learning for cyclic linear causal models, with Carlos Améndola, Philipp Dettling, Mathias Drton, Federica Onori; `https://proceedings.mlr.press/v124/amendola20a.html`

○ Identifiability of homoscedastic linear structural equation models using algebraic matroids, with Mathias Drton, Benjamin Hollering; `https://arxiv.org/abs/2308.01821`

○ Partial homoscedasticity in causal discovery with linear models, with Mathias Drton; `https://ieeexplore.ieee.org/document/10304270`

Teaching

Teaching assistant
- Mathematics 1 (TUM-BWL); WS 2019/20, WS 2021/22
- Graphical Models in Statistics; SS 2021
- Fundamentals of Mathematical Statistics; WS 2020/21, WS 2022/23
- Statistics for Business Administration (with Introduction to R); SS 2020, SS 2022, SS 2023

Supervisions
- TUM Data Innovation Lab project co-mentor: Prediction and clustering critical suppliers
- Master thesis supervision: Applying double machine learning and BART methods to the American Causal Inference Conference 2022 Data Challenge
- Master thesis supervision: Partial homoscedasticity in graphical models

Talks

- Identifiability of cyclic linear SEMs via algebraic matroids, 18. Doktorand:innentreffen der Stochastik 2023. Heidelberg University; Aug 23, 2023

- Identifiability of linear structural equation models with homoscedastic errors using algebraic matroids, German Probabiliy and Statistics Day. University of Duisburg-Essen; Mar 8, 2023

- Partial homoscedasticity in causal discovery with linear models, ETH-UCPH-TUM Workshop on Graphical Models. Academy center TUM Raitenhaslach; Oct 12, 2022

- Identifiability of linear structural equation models under homoscedastic errors using algebraic matroids, 10th World Congress in Probability and Statistics. Online; Jul 21, 2021

- Structure learning for cyclic linear causal models, 36th Conference on Uncertainty in Artificial Intelligence. Online; Aug 5, 2020

Skills

Software
- Use of LaTeX and Mathematica in research
- Use of R (Rstudio) for statistical computing since bachelor university
- Experience with Python (PyCharm) on graphical model and causal inference methods
- A little experience with Macaulay2

General IT Skills
- SQL as part of master curriculum
- Operating system: experience with Windows and Linux in research
- Version control: use of Git

Languages
- German – completed a B1.1 level course in 2023
- English – C1, my master education and the working language during my employment at TU Munich has been English

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References

1

Prof. Ph.D. Mathias Drton
Technical University of Munich
Chair of Mathematical Statistics
(Prof. Drton)
Contact: mathias.drton@tum.de
Phone: +49 (89) 289 - 17432

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Prof. Dr. Carlos Enrique Améndola Cerón
Technical University of Berlin
Algebraic and Geometric Methods in
Data Analysis
Contact: amendola@math.tu-berlin.de
Phone: +49 (30) 314 - 25657

Jun Wu

Munich, February 14, 2024