

Gunnar König

✉ gunnar.koenig@pm.me 📍 gunnarkoenig.com

EDUCATION

LMU Munich 2019 – now

PhD in Statistics

- **Thesis:** A Causal Perspective on Interpretable Machine Learning
- **Supervisors:** Bernd Bischl, Moritz Grosse-Wentrup

University of Vienna 2019 – now

Affiliated Researcher

University of Warwick 2021

Affiliation for Data Science for Social Good Summer School

LMU Munich 2016 – 2018

ESG M.Sc. Data Science

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- **Thesis:** Causal Inference in Calcium Imaging
- **Supervisor:** Moritz Grosse-Wentrup

TU Munich 2015 – 2016

Courses from B.Sc. Mathematics

TU Munich 2012 – 2016

B.Sc. Information Systems

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- **Thesis:** Online Classification with Adaptive Sparse Grid Kernels
- **Supervisor:** Valeriy Khakhutskyy, Hans-Joachim Bungartz

École Polytechnique - Université de Montréal 2015

Exchange semester

Friedrich-List-Gymnasium Reutlingen 2012

Abitur

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WORK EXPERIENCE

Connected Life 2016 – 2018

Data Scientist

Munich, Singapore

Siemens 2015 – 2016

Werkstudent Data Science

Munich

PUBLICATIONS

Decomposition of Feature Importance into Direct and Associative Components (DEDACT) 2021

G. König, T. Freiesleben, G. Casalicchio, B. Bischl, M. Grosse-Wentrup

arXiv:2106.08086

Relative feature importance 2021

G. König, C. Molnar, B. Bischl, M. Grosse-Wentrup

25th International Conference on Pattern Recognition (ICPR)

A causal perspective on meaningful and robust algorithmic recourse 2021

G. König, T. Freiesleben, M. Grosse-Wentrup

ICML Workshop on Algorithmic Recourse

Relating the PDP and PFI to the Data Generating Process <i>C. Molnar, T. Freiesleben, G. König et al.</i>	2021 under review
General pitfalls of model-agnostic IML methods <i>C. Molnar, G. König et al.</i>	2021 under review
Pitfalls to avoid when interpreting machine learning model <i>C. Molnar, G. König et al.</i>	2020 ICML XXAI Workshop
Model-agnostic Feature Importance and Effects with Dependent Features <i>C. Molnar, G. König et al.</i>	2020 arXiv:2006.04628, under review
A causal perspective on challenges for AI in precision medicine <i>G. König, M. Grosse-Wentrup</i>	2019 PMBC

TEACHING

Seminar Explainable AI <i>Lecturer</i>	21/22 LMU Munich Center for Mathematical Philosophy, LMU Statistics Department
Seminar Causality <i>Lecturer</i>	21 LMU Statistics Department
Lecture Interpretable Machine Learning <i>Course Materials</i>	20/21 LMU Statistics Department
Seminar Ethics in AI <i>Lecturer</i>	20/21 LMU Statistics Department
Seminar Current Research in Data Science <i>Lecturer</i>	20/21 LMU Statistics Department
Seminar Causality <i>Lecturer</i>	20 LMU Statistics Department
Seminar Limitations of Interpretable ML <i>Lecturer</i>	19/20 LMU Statistics Department

SOCIAL OUTREACH

ThinkTech g.e.V. <i>Vice President</i>	2019 – 2021 Munich
ThinkTech g.e.V. <i>Member</i>	2018 – now Munich
WeRePack <i>Team Member</i>	2017 - now Munich