Lena Maria Stempfle

✉ stempfle@chalmers.se
👤 LinkedIn

PhD student in machine learning for health care with particular interest in interpretability and prediction with missing values. Current interests also centre around causal inference and causality in health care settings and working with registry data.

EDUCATION

08/2020 – present	**Chalmers University of Technology, Gothenburg/Sweden** *PhD Candidate in Machine Learning for Healthcare* • Interpretable machine learning • Predictions under missing values • Causal Inference & causality
08/2020 – present	**Wallenberg AI, Autonomous Systems and Software Program (WASP), Sweden** *Graduate Student*
04/2024 – 05/2024	**PreMeDICaL Inria-Inserm team Montpellier, Montpellier/France** *Visiting research student* • Predictions under missing values in context of TraumaBase • User study to evaluate interpretable machine learning and missing values
10/2017 – 07/2020	**Karlsruhe Institute for Technology (KIT), Karlsruhe/Germany** *M.Sc. in information systems and management* Thesis topic: Time series analysis for the recognition of behavioural parameters in people with dementia
01/2019 – 06/2019	**Chalmers University of Technology, Gothenburg/Sweden** Erasmus Exchange Program in Computer Science

PUBLICATIONS

MINTY: Rule-based models that minimize the need for imputing features with Mmissing values, Lena Stempfle and Fredrik D. Johansson
Under Review

Sharing pattern submodels for prediction with missing values,
Lena Stempfle, Ashkan Panahi, Fredrik D. Johansson
AAAI Conference on Artificial Intelligence. 37, 8 (Jun. 2023), 9882-9890

Predicting progression & cognitive decline in amyloid-positive patients with Alzheimer's disease, Dansson et al.
Alzheimer's Research & Therapy volume 13, Article number: 151 (2021)

TEACHING

08/2020 – present	**Chalmer University of Technology & University of Gothenburg, Sweden**

Teaching assistant and lecturer on master level
- Introduction to data science
- Design for AI systems
- Research methods in data science
- Causality & causal inference

PROFESIONAL EXPERICENCE

07/2019 – 07/2020	**Institute for Information Infrastructure at KIT, Karlsruhe/Germany**

Research Assistant
- Research support in data analytics for health care data
- Creation and performance of human-computer experiments

10/2018 – 01/2019	**Institute for Information Systems and Marketing (IISM) and Chair for Information Systems and Service Design at KIT, Karlsruhe/Germany**

Research Assistant
- Implementation of a research design online tool
- Teaching assistant for "Information systems and digital health"

11/2017 – 08/2020	**Health care Lab @Karlsruher Service Research Institute (KSRI) and department of operations research, Karlsruhe/Germany**

Research Assistant
- Simulating layout planning for hospital emergency rooms using ML
- Organization of the science conference Operational Research Applied to Health Services (ORAHS) 2019

04/2015 – 12/2016	**Fraunhofer Institute for Applied Information Technologies (FIT), Competence centre for finance and information management, Bayreuth/Germany**

Research Assistant
- Support for applications in publicly funded projects (HORIZON 2020)
- Support in research projects in information systems & mobility

PROGRAMMING & LANGUAGES

Coding languages	Python, R, SQL und HTML
Languages	German - *mother tongue,* English - *professional*, French, Spanish and Swedish - basics

VOLUNTEER WORK & SUMMER SCHOOLS

10/2022 – 10/2023	Member of Computer Science and Engineering Ph.D. Council, *Chalmers University of Technology*
10/2022 – 10/2023	*Co-organizer of Machine Learning seminar @ Data Science and AI division, Chalmers University of Technology*
08/2021	Summer School Data Science and AI in Health (online) *Gröningen/ Netherlands*
08/2021	Eastern European Machine Learning Summer School (online) *Budapest/ Hungary*

05/2020	*S*peaker @ Women in Data Science Conference- Sideways into Data Science
07/2019 – 2023	Founder of the non-profit organization - she.codes@KIT
	Programming courses for girls by female students