Christine Hedde - von Westernhagen

Utrecht · Netherlands

Research interests: Social network analysis, sustainability transitions, complex systems, causal inference.

Education

Degree programs

Utrecht University, Methodology and Statistics for the Behavioural, Biomedical and Social Sciences, M.Sc. · GPA: 8.44/10 (Dutch grading system) 2021 - 2023

· Course work: Mathematical statistics, survey data analysis, Bayesian statistics, R programming, biomedical statistics, causal inference methods, structural equation modeling, multi-level modeling, psychometrics, supervised and unsupervised learning methods

· Thesis: "Predicting Covid-19 infections using multi-layer centrality measures" Supervisors: Javier Garcia-Bernardo, Ayoub Bagheri · Grade: 8.5

University of Bremen, Political Science, B.A. · GPA: 1.44 (German grading system) 2017 - 2021

· Specializations: Political System of Germany, Comparative Politics and European Politics, Policy and Welfare State Research, Quantitative Research Methods

• Thesis: "Colonial-Era Missions and Long-Term Consequences for Education in Africa: A Replication Study" Supervisors: Bastian Becker, Nate Breznau • Grade: 1.3

Additional courses

Radboud University Nijmegen, Summer School on Social Research Methods, "Inferential Network Analysis"

07/2022

· One-week course on network inference methods, including Exponential Random Graph Models, Stochastic Actor Oriented Models, Latent Space Models, Relational Event Models

Employment

PhD Candidate, Eindhoven University of Technology, Department of Industrial Engineering and Innovation Sciences

09/2023 - present

· Research for the ERC project "FAST: Fostering social tipping dynamics to accelerate sustainability transitions", Supervisors: Floor Alkemade, Karlijn van den Broek

· Teaching assistance for BSc course "Statistics for Sustainable Innovation"

Student Research Assistant, Utrecht University, Department of Methodology and Statistics 10/2022 - 08/2023

- · Large scale data preparation for the ODISSEI summer school on Computational Social Science
- · Data analysis and writing for a paper about COVID-19 transmission in the Dutch population
- · Maintaining the website of the Natural Language Processing Group

Tutor for statistics, University of Bremen, Faculty of Social Sciences

Student Research Assistant, University of Bremen

ERC Project "The Legacy of Colonialism: Origins and Outcomes of Social Protection"

 \cdot Digitizing historical data sources, editing and visualization of geospatial data, writing for publication

Project "Moving for the Kids"

· Management of survey data, acquisition of administrative data, exploratory data analyses

Volunteering

Data science volunteer, CorrelAid

· Project lead for automating R Markdown reports on diversity experiences in cooperation with *Citizens* for Europe

· Participation in internal workshops and organisational tasks

Student representative, University of Bremen

12/2019 - 10/2020

09/2020 - 12/2021

• Member of the appointments committee for the chair of *Sociology and Quantitative Research Methods for the Social Sciences*

Skills

Languages

German (native)

English (fluent, Cambridge Certificate in Advanced English - 205pts./CEFR C2)

French (intermediate)

Dutch (intermediate)

Software and Programming

R (incl. R Markdown and Shiny), Python, STATA, Git, LATEX, QGIS

Projects and Publications

Data Analysis and Visualization

Co-authorship network of the SOCIUM research center

 \cdot Data collection on co-authorship relations and working paper on temporal network formation [Repository]

· Tutorial on network analysis in R and Python (given at a CorrelAid Bremen meet-up, [Repository])

Academic Writing

Hedde-von Westernhagen, C., Garcia-Bernardo, J., Bagheri, A. (*submitted*): Predicting COVID-19 Infections Using Multi-layer Centrality Measures in Population-scale Networks.

· Preprint: https://arxiv.org/abs/2310.14767

Hedde-von Westernhagen, C., Becker, B. (2022): Mapping Missions: New Data for the Study of African History, *Research Data Journal for the Humanities and Social Sciences*, 7(1), 1-33. https://doi.org/10.1163/24523666-bja10027

· *Dataset*: Hedde - von Westernhagen, C., Becker, B. (2022). "Mapping Missions: New Data for the Study of African History (Dataset)", https://doi.org/10.7910/DVN/E9EEMQ, Harvard Dataverse, V1

References

Floor Alkemade, PhD: Professor at the Department of Industrial Engineering & Innovation Sciences, Eindhoven University of Technology, Groene Loper, 5612 AE Eindhoven. f.alkemade@tue.nl

Bastian Becker, PhD: Postdoc at the Department of Social Sciences, Humboldt University Berlin, Universitätsstrasse 3b, 10117 Berlin. bastian.becker@hu-berlin.de ⊠

Javier Garcia-Bernardo, PhD: Assistant Professor at the Department of Methodology and Statistics, Utrecht University, Padualaan 14, 3584 CH Utrecht. j.garciabernardo@uu.nl ⊠