

Jan Sodoge

M.Sc. Computational Social Science — Doctoral Researcher
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- PRINCIPAL INTERESTS** My work focuses on assessing, modeling, and understanding the impacts of natural hazards (specifically droughts) on social-ecological systems. I apply text mining, machine learning and natural language processing, and participatory modeling.
- ACADEMIC BACKGROUND**
- M.Sc. Computational Social Science* 2021
Linköping University, Sweden
- Thesis title: Economic heterogeneity, inequality and forest transitions: an empirically-grounded dynamic evaluation of agricultural land-cover change.
Grade: A (excellent)
- B.Sc. Environmental System Science and Geography* 2019
University of Osnabrück, Germany
- Thesis title: Participatory modelling for investigating the complexity of social, demographic and cultural issues linked to the Water-Energy-Food Nexus in the Omo-Turkana Basin.
Grade: 1.0 (excellent)
- EMPLOYMENT**
- Doctoral Researcher* 2021 - Present
Helmholtz-Centre for Environmental Research, Germany
- Research on the assessment and modeling of drought impacts through computational and participatory methods. Supervised by Dr. Mariana M. de Brito and Prof. Christian Kuhlicke.
Thesis working title: Assessing current and future droughts impacts: A mixed-methods approach
 - Member of the working group social-science water research
- Research Assistant* 2018 - 20189
University of Osnabrück, Institute for Environmental System Science, Germany
- Assistance in the DAFNE project, writing and editing of project-related reports and newsletters, overall project organization.
- INTERNSHIPS**
- Research Internship* 2019 - 2020
Center for research in economics and Statistics (CREST), France
- Contribution to the development of a statistical software for self-organizing maps. Supervised by Etienne Ollion and Julien Boelaert.
- TEACHING**
- Teaching Assistant* 2019 - 2020
University of Osnabrück, Institute for Environmental System Science, Germany
- Participatory Modelling (winter term 2019), agent-based modelling (winter term 2019), ecological modelling (winter term 2019, 2020)
- AWARDS**
- Helmholtz Information and Data Science Academy Annual Conference, award for the best scientific telegram

- PUBLICATIONS**
1. Boelaert, Julien, Etienne Ollion, Jan Sodoge, Mohamed Megdoud, Otmane Naji, Arnaud Lemba Kote, Theo Renoud, Samuel Hym, and Maintainer Julien Boelaert. "Package 'aweSOM'." (2021).
 2. Akinsete, Ebun, Phoebe Koundouri, Xanthi Kartala, Nikolaos Englezos, Zeray Yihdego, Julie Gibson, Jonathan Lautze, Caroline van Bers, Geeske Scholz, and Jan Sodoge. Sustainable WEF Nexus Management: A Conceptual Framework to Integrate Models of Social, Economic, Policy and Institutional Developments. No. 2107. Athens University of Economics and Business, 2021.
- CONFERENCE CONTRIBUTIONS**
1. JSodoge, J., de Brito, M. M., and Kuhlicke, C.: Automatized drought impact detection from newspaper articles using natural language processing and machine learning, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022.
 2. Jan Sodoge, Mariana M. de Brito, Christian Kuhlicke (2022): Automatized drought impact detection using natural language processing. World Canals Conference 2022.
 3. Madruga de Brito, M., Sodoge, J., Kreibich, H., and Kuhlicke, C.: Text-mining of natural hazard impacts (TM-Impacts): an application to the 2021 flood in Germany, EGU General Assembly 2022, Vienna, Austria, 23–27 May 2022.
- INVITED TALKS**
1. Text mining of natural hazard impacts (TM-Impact) - University of Leipzig, Germany - 11.2021
- LANGUAGES & SOFTWARE**
- German (native speaker)
 - English (fluent)
 - French (basic)
 - R (proficient, among others: tidymodels, tidyverse, shiny, targets, sf)
 - Python (intermediate)
 - NetLogo (proficient) & Repast Simphony (intermediate)
 - HTML & CSS & Javascript (learning in progress)
 - QGIS (basic spatial analysis and map creation)
- PROJECTS**
- Computational Social Journalism* 2020 - Present
 I co-founded this [web-based platform](#) as an outlet to develop a personal vision on journalism. It covers the intersection of data-driven storytelling and computational social science.
- Basketball Statistics Consultation* 2016 - Present
 Development of basketball advanced statistics and analytics solutions for multiple German professional basketball teams. I have worked together with coaches, trying to establish statistical measures and tools that support coaching workflows.