

About

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| Nationality: | Switzerland | E-Mail: | hergernadja@gmail.com |
| Languages: | German (native), English (fluent), French (familiarity) | Website: | https://nherger.github.io |
| | | LinkedIn: | https://www.linkedin.com/in/nadja-herger |

Profile

Data- and purpose-driven professional with demonstrated expertise in Data Science and Responsible AI. Strong technical background with 8+ years of experience analysing complex datasets using advanced AI/ML methods to gain novel insights into data and deliver solutions with real-world impact. Strong communication, stakeholder management, and change management skills related to the roll-out of an enterprise-wide Model Governance program. Experience in managing high-performing globally-distributed teams in a large organisation. Passionate about the use of technology for social good and the ethical use of AI.

Work Experience

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| Apr 2023 - now | Director, Model Stewardship • Thomson Reuters, Data & Analytics • Zug, Switzerland <ul style="list-style-type: none"> - Managing a high-performing team of seven individuals across four countries. - Contributing to internal comms initiatives around AI, Model Governance, and Ethics. - Develop guidance and training around the responsible use of Generative AI. - Translate internal Standards into effective controls and scalable implementation practices. - Increasing the adoption of Model Monitoring, ensuring models remain fit for purpose. |
| Jul 2022 - Apr 2023 | Manager, Model Stewardship • Thomson Reuters, Data & Analytics • Zug, Switzerland <ul style="list-style-type: none"> - Managing a high-performing team of four Model Steward Partners across three countries. - Responsible for introducing AI/ML Model Governance to all model-developing and owning teams across Thomson Reuters, including the creation of training material (workshops, learning modules), org-wide communication, providing support to ensure compliance to newly introduced Policies and Standards. Oversight of 300+ models across TR. - Stakeholder management and change management to create a culture of accountability around the design, development, and deployment of trustworthy AI solutions. - Member of TR's internal Ethics Advisory Committee. |
| Jan - Jun 2022 | Manager, Data and Model Ethics • Thomson Reuters, Data & Analytics • Zug, Switzerland <ul style="list-style-type: none"> - Managing a team of two Senior Policy Analysts across two locations (CH, CA). - Support the build-out of the Data and Model Ethics strategy and framework. - Provide technical advice and training on data and models ethics-related issues (incl. tooling, best practices) to various stakeholders across the enterprise. - Supported the initiative to embed ethics-as-a-service as part of the Enterprise AI Platform. |
| Apr - Dec 2021 | Senior Data Scientist • Thomson Reuters, TR Labs • Zug, Switzerland <ul style="list-style-type: none"> - Co-lead of the Human-Centric AI research theme as part of the Labs research program. Oversight of various research projects, and definition of the research direction. - Involvement in a research project around interactive topic modeling, as well as exploration of data drift for unstructured text. - Took on the Data Science lead role for a range of Natural Language Processing (NLP) projects, responsible for coordinating work amongst a group of Data Scientists, and communicating results with stakeholders. - Played a crucial role in recruiting a team of Data Scientists in London and Bangalore. |
| Sep 2018 - Mar 2021 | Data Scientist • Thomson Reuters, TR Labs • Zug, Switzerland <ul style="list-style-type: none"> - Contributed to various NLP projects, including classification, summarization, entity extraction, using traditional Machine Learning techniques as well as Deep Learning. Analysed data and trained models using AWS Sagemaker. - Mentored several Data Science interns. - Participated in a working group to develop Thomson Reuters' first AI Principles. |

- Jul 2015 - **PhD in Climate Science** • University of New South Wales • Sydney, Australia
- Jul 2018
- Combined global climate model output in a way that their interdependency is accounted for. The optimal subset is used to better constrain future climate projections (mainly temperature and precipitation fields).
 - Used machine learning tools such as multidimensional scaling and clustering to better understand the relationship between climate models and observations.
 - Published several peer-reviewed articles and presented at various international conferences.

Technical Skills

Data Science: Machine Learning (SVM, Random Forest, LDA, ...), Deep Learning (LSTM, BERT, ...), Gen AI
 Languages: Python (advanced), MATLAB (intermediate), R (beginner), bash, SQL
 Libraries: pandas, spacy, gensim, HuggingFace, scikit-learn
 Cloud: AWS (Sagemaker - Clarify & Monitor, S3, EC2)
 Docu. / Code: MS Office Suite, Latex, Jupyter Book, Azure DevOps, git via GitHub, VS Code
 Online courses: Ethical AI (Udacity), Generative AI with LLMs (Coursera), Data Ethics & Responsible AI (EDM)

Education

2015 - **Ph.D.** in Climate Science (Climate Change Research Centre) UNSW Sydney
 2018 Thesis: *Towards a viable alternative to model democracy using optimal climate model subset selection* • Won the Dean's Award for Outstanding PhD Theses. (Australia)

2013 - **M.Sc.** in Environmental Sciences (Major in Atmosphere and Climate) ETH Zurich
 2015 Thesis: *Predicting climate change by fixed patterns: Improved approaches and limitations* • Conducted at NCAR in Boulder, USA • Grade: 5.79 out of 6 (degree awarded "with distinction") (Switzerland)

2010 - **B.Sc.** in Environmental Sciences (Focus on Atmosphere and Climate) ETH Zurich
 2013 Thesis: *Susceptibilities in mixed-phase aerosol-cloud interaction simulated over an Alpine transect* • Grade: 5.46 out of 6 (Switzerland)

Awards

2019 **Dean's Award for Outstanding PhD Theses** UNSW Sydney
 This award recognises PhD graduates who have produced a thesis that is considered outstanding by both examiners. (Australia)

2015 - **University International Postgraduate Award** UNSW Sydney
 2018 Covers the full cost of tuition fees during the Ph.D. programme (AUD \$117,360) and provides a living allowance valued at AUD \$77,547 in total. (Australia)

2015 - **Top up scholarship** UNSW Sydney
 2018 AUD \$15,000 in total from the Climate Change Research Centre. (Australia)

2013 - **Excellence Scholarship and Opportunity Programme** ETH Zurich
 2015 Covers the full study and living costs (CHF 44,000) and tuition fee waiver (CHF 2,596) during the MSc degree. Awarded to the top 2% of students starting a MSc programme. (Switzerland)

Publications and Public Speaking

I have led and co-authored a range of peer-reviewed articles which are published in scientific journals. The full list can be found here: <https://nherger.github.io/publications/>

I had the pleasure to present at various academic and industry conferences, events and meetups. Topics include AI Ethics (incl. Explainable AI) and use cases of Natural Language Processing in industry. A select list of speaking engagements can be found here: <https://nherger.github.io/speaking/>