



Janick Weberpals, RPh, Ph.D.

Health Data Scientist

Born 1989 in Germany,
Current location: Boston, MA

janickweberpals.github.io

+1 (857) 381-7865

linkedin.com/in/weberpals

janick.weberpals@me.com

About me

I'm a healthcare data scientist with 8+ years of experience in the design and analysis of large healthcare databases studies in both industry and academia. I'm passionate about the integration of various data modalities (EHR/EMR, imaging, NLP, claims) using deep learning to solve real-world problems in healthcare and causal inference. In addition, I have deep domain knowledge in the fields of cancer and cardiovascular diseases. I have (co-) authored 20+ peer-reviewed methodological and clinical publications and received several awards.

Skills

R

Medical coding standards (ICD, etc.)

Python, Tensorflow, Keras

LaTeX, Markdown, Quarto

HPC, SLURM, Unix

SQL

SAS

Education

- 2018-2020 **Postdoctoral Fellowship** Data Science, Roche Innovation Center, Germany
Deep learning on electronic health record (EHR) data
- 2015-2018 **Ph.D. Epidemiology** Medical Faculty, Heidelberg University, Germany
Graduated with *Summa cum laude* honors
- 2015-2018 **Board certification** Bavarian Chamber of Pharmacists, Munich, Germany
Specialized Pharmacist in Drug Information
- 2010-2015 **Registered Pharmacist** College of Pharmacy, Marburg University, Germany
Pharmaceutical Sciences (PharmD equivalent)

Professional Experience

- 2022- **Instructor in Medicine** Harvard Medical School, Boston, MA, USA
Faculty at Harvard Medical School leading innovative projects utilizing Machine/Deep learning to leverage routinely collected healthcare data (EHR/EMR, imaging, NLP, claims) to study and generate high-quality comparative effectiveness and safety of medical interventions.
- 2022- **Investigator** Brigham and Women's Hospital, Boston, MA, USA
Working on NIH and FDA-funded projects to leverage large, federated healthcare databases for medical evidence generation.
- 2020-2022 **Data Scientist** Hoffmann-La Roche/Genentech, Basel, Switzerland
Awarded "Exceptional Performance" in 2021. Led and collaborated in cross-functional teams to implement and validate ML/NLP algorithms and real-world database studies which supported and expedited clinical teams with regulatory drug applications in oncology and neuroscience. Contributed to R package development which increased speed and validity of real-world evidence projects.
- 2018-2020 **Postdoctoral Fellow in Deep Learning on EHR** Roche, Munich, Germany
Implemented deep learning methods to analyze large electronic health record (EHR) databases which supported protocol design and strategic decision making in single-arm clinical trials.
- 2015-2018 **Doctoral Researcher** German Cancer Research Center, Heidelberg, Germany
Analysis of large oncological database linkages by partnering with international cancer registries which resulted in 14 high-impact publications used for national public health & cancer survival surveillance.
- 2014-2015 **Research Scholar** University of Florida, Gainesville, FL, USA
Contributed to a multidisciplinary project to develop a *predictive* risk model to identify and prevent adverse events among hospitalized patients. The model was implemented and tested in a few US hospitals.

Selected Awards & Honors

- 2018 Stephan-Weiland Award (German Society for Epidemiology)
- 2018 Advancement Award for best Ph.D. thesis in Epidemiology (German Association for Medical Informatics, Biometry and Epidemiology)
- 2017 Poster Award (Helmholtz International Graduate School)
- 2016 & 17 International Society for Pharmacoepidemiology (ISPE) Scholarship

Selected publications (full list: janickweberpals.github.io/publications)

Weberpals J, Becker T, Schmich F, Ruettinger D, Theis FJ, Bauer-Mehren A. Deep learning-based propensity scores for confounding control in comparative effectiveness research: a large-scale real-world data study. **Epidemiology** (2021).

Loureiro H, Becker T, Bauer-Mehren A, Ahmidi N, Weberpals J. Artificial Intelligence for Prognostic Scores in Oncology: a benchmarking study. **Frontiers in Artificial Intelligence** (2021).

