Theodore Hermann | Resume

Skills: Statistical analysis, data preparation and visualization, written and oral communication

Code: R, Python, Julia, bash, Netlogo, SQL

Tech: git, Docker, VSCode, RStudio, Linux, Quarto, QGIS

Interests: Open-source software, reproduceability in science, tinkering with my home server

Languages: English (native fluency), Germany (B2)

Lützenstr. 2, 10711, Berlin
0176 544 06201
ted.w.hermann@gmail.com
ORCID: 0000-0003-2632-7338

Summary

A data scientist with a diverse background in statistics, programming, product development, academic research, English-language writing, oral presentation, and publishing.

Experience

Postdoctoral Researcher - University of California, Santa Cruz — 06/2021–present

* Designing an agent-based modeling toolkit for predicting environmental impacts on endangered species
* Tech used: R, Julia, Netlogo, Docker, bash, git, Quarto, QGIS
* Acquired, cleaned, and analyzed data sets and visualized results
* Conducted statistical analyses including hypothesis testing
* Developed predictive models using machine learning with a balanced focus on simplicity and effectiveness
* Presented to stakeholders, wrote both technical and user-facing documentation, and published scientific articles

Data Science Consultant - Electric Power Research Institute — 03/2020–04/2020

* Developed a data-cleaning and machine-learning pipeline to predict damage in critical industrial components
* Tech used: Python, git
* Worked closely with our stakeholder, presented results, and provided a white paper and source code
* The error of 7% for our models was a significant improvement over the industry benchmark of 15%

Freelance Writing/Editing Consultant - Self-employed — 01/2014–06/2021

* Provided editing and writing services for diverse projects, including technical papers and book series
* Worked iteratively and closely with clients to deliver clear, concise writing

Ph.D. Candidate - State University of New York (SUNY–ESF) — 05/2010–12/2018

* Conducted statistical analyses, including regression, hypothesis testing, and non-metric multidimensional scaling
* Tech used: Python, Microsoft Office
* Visualized results and published in academic journals
* Presented findings to the public

Education

Ph.D. in Biology - SUNY–ESF — 2010–2018

* Thesis: Migrations of neotropical freshwater fishes inferred from otolith microchemistry and larval drift: conservation implications
* Developed novel analytical approaches to deducing large-scale migrations in fish species that provide marginalized communities with food and economic opportunity

Master of Public Administration - Syracuse University — 2012–2013

* Final Project: Videogames and Apps for Peace–An overview of videogames and behavior change
* Coursework in public policy, economics, statistics, and leadership

Bachelor of Science - Cornell University — 2005–2009

* Coursework in biology, mathematics, and environmental science
* Worked in several laboratories conducting experiments, field studies, and statistical analyses