Nicholas A Potter, PhD

Github | LinkedIn

Qualifications

- Careful, conscientious problem solver adept at translating between big picture goals and the concrete steps needed to reach them.
- Over 10 years of research experience working with large spatial data sets and confidential survey data with data processing and analysis, writing code for new statistical methods, and creating figures and interactive dashboards to communicate results.
- Accomplished science and computing communicator comfortable with a wide range of audiences.

Education

2021 **Doctor of Philosophy**, Economics, Washington State University, Pullman WA

2018 **Certified Instructor**, Data and Software Carpentry for Reproducible Research, Seattle, WA

2005 **Master of Science**, Applied Mathematics, University of Massachusetts – Amherst, Amherst MA

2002 **Bachelor of Arts**, Economics, Hampshire College, Amherst MA

Relevant Experience

Research Agricultural Economist 2021 – Present
United States Department of Agriculture, Economic Research Service

- *Skills and Tools*: R (data.table, ggplot2, sf, terra, tidyverse); Python (pandas, geopandas, multicore); Azure; git, GitHub, and copilot.
- *Activities*: Conducted rigorous research using a combination of large spatial data and confidential survey data; authored official reports for public and policy audiences; authored research journal articles on topics related to water resources, irrigation, and water marketing; conducted analysis for Federal policies and programs; presented research at academic conferences; taught R lessons for the USDA Data Science Training Program.
- *Accomplishments*: Spearheaded development of the Economic Research Service's GitHub use policy; wrote an R package to ensure reported statistics meet disclosure requirements; published multiple official government reports and academic articles; awarded recognition for policy analysis completed in a short time frame.

Research Assistant 2016 – 2021
Washington State University

- *Skills and Tools*: R (data.table, ggplot2, sf, terra); Python (pandas, geopandas, multicore); high-performance computing (HPC) Unix clusters; LaTeX; GitHub.
- *Accomplishments*: Utilized HPC systems to create a spatial dataset of climate, soil, water use, and agricultural data and conducted research on climate impacts on irrigated agriculture. Wrote the rnassqs R package for accessing data from the USDA-NASS Quick Stats API, now part of the rOpenSci organization. Organized and taught data science and reproducible research workshops.

Associate in Research 2012 – 2016
Washington State University Center for Sustaining Agriculture and Natural Resources

- *Skills and Tools*: R; Python (Django, Flask); JavaScript; Excel.
- *Accomplishments*: Created lab web site to disseminate research outputs; engaged in research on pesticide residues and nutritional content in organic and conventional agricultural products.