Nicholas J. Lyon

Data Scientist & Scientific Communicator

Self-starting and enthusiastic communicator with 8+ years of experience working with biological data in a variety of coding languages, designing quality assurance and control workflows, and presenting results in a range of written and oral formats. Effective at carrying out individual work while also excelling in collaborative team settings and big-picture project management. A bright, adaptable worker who can successfully lead or assist on dynamic and ongoing projects.

Skills

R · Git · Quarto · Microsoft Office · Python · R Package Development · Data Visualization · Team Management · Zoom Spatial Data Wrangling · WordPress · Survey Design · Text Mining · Experimental Design · R Shiny Project Management · SQL · Spatial Data Management · Scientific Writing · Science Communication · Quarto · Teaching GitHub · Public Speaking · Analysis & Modeling · Workshop Development · Project Documentation

Selected Professional Experience

Data Scientist | LTER Network Office, Santa Barbara CA | (Feb. 2022 – Present)

- Worked with over 100 researchers spanning 12 working groups to meet their data-related and analytical needs
- Designed and taught workshops on code collaboration with version control, R's Tidyverse, and making R Shiny apps
- Managed projects throughout their lifecycle and created documentation to clearly define institutional best practices
- Translated Python and SQL code into equivalent scripts in R
- Analyzed and wrangled spatial data from a variety of sources (including lithology, land cover, etc.)

Adjunct Professor of Biology | Stonehill College, Easton MA | (May – July 2023)

- Designed an 8-week summer course introducing fundamental data science skills to life sciences undergraduates
- Created low- and high-stakes assignment rubrics with course-aligned learning objectives
- Offered holistic feedback on student work and encouraged iterative revision processes
- Helped students develop professional portfolios of their strongest in-class work hosted on GitHub

Data Scientist & Network Administrator | Herbivory Variability Network, Lansing MI | (Aug. 2021 – Feb. 2022)

- Coded a quality assurance pipeline in R for a database collected by 200 collaborators based in more than 30 countries
- Designed a data management plan to standardize post-collection data handling and distribution across the Network
- Revised the set of protocols used to train collaborators before and during data collection
- Created an R Shiny app for preliminary quality assurance and control followed by data submission

Biology Teaching Assistant | University of Georgia, Athens GA | (Aug. 2020 – May 2021)

- Facilitated students in honing their scientific observation, experimental design, and writing skills
- Designed instructional content for 25 weeks of labs that emphasized critical thinking skills across two semesters
- Provided thorough and constructive written feedback on lab reports as well as on quiz-style assignments
- Aided students in identifying their first independent research question and implementing the subsequent experiment

Selected Products

Lyon N.J. and Chen, A. (2023). Collaborative Coding with GitHub. American Geophysical Union, San Francisco, CA

Herbivory Variability Network (2023). Plant Size, Latitude, and Phylogeny Explain Within-Population Variability in Herbivory. *Science*

Lyon N.J. (2023). supportR: Support Functions for Wrangling and Visualization. R package version 1.2.0.

Gaynor, K. et al. (2022) **Ten Simple Rules to Cultivate Belonging in Collaborative Data Science Research Teams**. *PLOS Computational Biology*

Education

Master of Science, Ecology and Evolutionary Biology – Iowa State University, Ames IA Bachelor of Science, Biology – University of Puget Sound, Tacoma WA