Nicholas J. Lyon

Data Scientist & Scientific Communicator

Self-starting and enthusiastic communicator with 7+ 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 · R Shiny · R Package Development · Data Visualization · Team Management · Zoom Public Speaking · WordPress · Survey Creation · Text Mining · Spatial Data Wrangling · Experimental Design SQL · Climate Data Management · Scientific Writing · Science Communication · Species Distribution Modeling · Teaching Generalized Linear Mixed Effect Models · Workshop Development · GitHub · Project Management · R Package Creation

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
- Taught workshops on collaboration with Git and GitHub, the `tidyverse` in R, and making R Shiny apps
- Created and maintained several R packages including tools covering a wide range of purposes
- 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. (2023). supportR: Support Functions for Wrangling and Visualization. R package version 1.0.0.

Lyon N.J. (2022). <u>Iterpalettefinder</u>: **Extract Color Palettes from Photos and Pick Official LTER Palettes**. R package version 1.1.0.

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

Lyon, N.J. et al. (2022) Sharing Science with R Shiny Apps. LTER All Scientists' Meeting, Monterey, CA

Education

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