Nicholas J. Lyon

M.S. <u>Ecology & Evolutionary Biology</u>, Iowa State U. B.S. Biology, U. of Puget Sound njlyon0.github.io nicholasjlyon@gmail.com linkedin.com/in/nicholasjlyon

Self-starting and enthusiastic data scientist with 8+ years of experience working with scientific data in a variety of coding languages, designing reproducible quality control, analysis, and visualization workflows, and sharing 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.

Expert

R · Git · GitHub · Markdown · QA/QC Spatial Data · Data Visualization Multivariate Statistics · GLMs · Ordination Project Management · Documentation

Skills

Intermediate

Python · Shiny · R Package Development HTML · Quarto · Text Mining Website Development · Teaching Team Management

Basic

SQL (pgAdmin) · SCSS CSS · Bash · Survey Design Machine Learning (MaxEnt)

Data Scientist | National Center for Ecological Analysis & Synthesis (NCEAS), Santa Barbara CA | Feb. 2022 – Present

- Collaborated with 120+ researchers in 12 working groups to meet data/analysis-related needs
- Created workshops on code collaboration with GitHub, R's Tidyverse, and interactive Shiny apps
- Managed separate projects from start to finish simultaneously
- Wrote documentation to clearly define within-group best practices and policies
- Translated Python and SQL code into equivalent scripts in R

Quantitative Skills Instructor | Long Term Ecological Research (LTER) Network, Santa Barbara CA | June 2024 – Present

- Recruited design team members, co-instructors, panelists, and guest instructors
- Created project management guidelines for all facets of course design (inside- and outside-facing)
- Lead the design of 7 (of 15) modules personally and collaborated on remaining modules
- Facilitated biweekly class sessions for the 27 students in the 2024 cohort

R / Python Bilingualism Website Creator | Self, Remote | Jul. 2023 – Present

- Self-taught Python through the lens of 'translating' R operations into comparable Python code
- Designed a website to store created bilingualism materials (nilyon0.github.io/collab bilingualism)
- Designed a range of increasingly complex operations and grouped those pages thematically
- Wrote extensive contributing guidelines for crediting collaborators

R Package Developer | Self, Remote | Jan. 2023 – Present

- Developed 7 R packages (6 published to CRAN) each containing functions in thematic groups
- Wrote unit tests for majority of functions as well as robust error/warning checks with informative messages
- Created clear function examples and vignettes for all packages
- Functions scopes include: data QC, ordination, image processing, data harmonization, linear model variants, etc.

Adjunct Professor | Stonehill College, Easton MA | May – July 2023 & 2024

- Designed a course introducing fundamental data science skills to life sciences undergraduates
- Helped students create professional portfolios of their strongest in-class work hosted on GitHub
- Offered holistic feedback on student work and encouraged iterative revision processes
- Created website to openly share course slide decks, rubrics, and policy documents (njlyon0.github.io/teach_r-for-biologists)

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

- Designed a QC workflow for standard data collected by 200+ collaborators from more than 30 countries
- Wrote a data management plan to standardize post-QC data handling and distribution
- Revised the set of protocols used to onboard new collaborators on data collection and entry
- Created a Shiny app for preliminary data QA/QC and standardized data submission