



EXPERIENCE

Fred Hutch Cancer Center · Senior Staff Scientist

07/2022 - present · Seattle, WA (remote)

- Built outreach software for publishing content, previewing data, and helping scientists comply with NIH policies using Shiny, GitHub Actions, and other tools
- Co-lead, analyzed, and curated data for [BioDIGS](#), a soil microbe genetics research consortium of over 100 students and faculty
- Co-lead outreach and user research for the NIH [AnVIL Platform](#), enabling genomic data science via cloud computing for 500+ users
- Led and managed \$579k NIH-funded program ("[GEMs](#)") that designs open-source genomic data science training modules with under-resourced colleges
- Led, developed, and managed \$200k/yr [Data Science for Environmental Health program](#), educating 40 trainees and public health government professionals annually
- Taught graduate-level courses in R programming and community data science consulting
- *Note that this work was conducted at Johns Hopkins University from 05/2021 - 06/2022.*



Johns Hopkins University · Postdoctoral Fellow

03/2020 - 05/2020 · Baltimore, MD

- Used bioinformatic tools to quantify genomic patterns among 1000+ plants adapted to 6 city landscapes



Boston Consulting Group · Data Scientist

03/2019 - 03/2020 · Boston, MA

- Productionalized PySpark pipeline describing and modeling client's 20K+ commercial banking customers for better product recommendations & risk intervention
- Designed & hosted fully customized RShiny dashboard for reducing internal carbon emissions by 30% in 5 years



Colorado State University · USDA NIFA Fellow

01/2017 - 12/2018 · Fort Collins, CO

- Led the Blue Grama Diversity Project, implementing hierarchical Bayesian models and analyzing 9,000+ genomic features to understand plant traits from population genetics

EDUCATION



PhD Ecology · Colorado State University

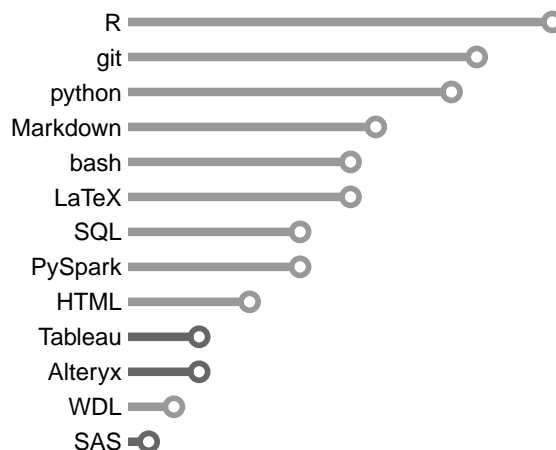
05/2019 · Fort Collins, CO



BS Biology · University of Virginia

05/2012 · Charlottesville, VA

SKILLS



statistics

Bayesian methods (RStan) · hierarchical models · mixture models · multivariate statistics · ANOVA · MANOVA · PERMANOVA · dimensionality reduction · repeated measures

supervised learning

large language model APIs · random forest · time series · linear, nonlinear, logistic regression · LDA · SEM

unsupervised learning

PCA · NMDS · k-means / hierarchical clustering · feature engineering

ACHIEVEMENTS



Excellence in Teaching Award

2022 (2x), 2023 (2x), 2024 (2x) · Johns Hopkins University



29 peer-reviewed publications

2010-2024 · [Google Scholar](#)