# Dana Paige Seidel

National Science Foundation Data Science Fellow & UC Berkeley PhD Candidate with 10 years experience in data wrangling and statistical modeling in R specifically for spatial and time series data.

## CONTACT

✉ dpseidel@berkeley.edu
🌐 https://www.danaseidel.com
📞 612.232.6708  🐦 @dpseidel
⌨ dpseidel  ✍ dpseidel  in dana-seidel

## EDUCATION

**UNIVERSITY OF CALIFORNIA, BERKELEY**
PhD in Environmental Science, Policy, & Management
Expected May 2019 | Berkeley, CA

**UNIVERSITY OF ALBERTA**
MSc in Biological Sciences
Aug 2014 | Edmonton, AB, Canada
Concentration in Ecology

**CORNELL UNIVERSITY**
BSc in Natural Resources
May 2011 | Ithaca, NY
Concentration in applied ecology
College of Agriculture and Life Sciences
Graduated *cum laude*

## SKILLS

- R • Data Analysis • Tidyverse
- Geospatial Analysis (R, Python, ArcGIS)
- Version Control, Git/Github
- Open Science • SQL
- Data Visualization • Biostatistics
- Regression Analysis
- Experimental Design • Teaching
- R Markdown • Shiny
- Open Source Development in R
- Webpage Development

## AWARDS

- Data Science for the 21st Century: National Science Foundation Research Traineeship ($32K, 2015-2017)
- Outstanding Graduate Student Instructor Award, UC Berkeley 2018
- Letter of Commendation for Excellence in Teaching, Univ. of Alberta 2012

## PUBLICATIONS

For full list of my publications, please see Google Scholar 🎓

## EXPERIENCE

**RSTUDIO** | Software Development Intern • Tidyverse Team
June 2018 – Aug 2018 | Remote
- Participated in open source R development for ggplot2 ⌨ (486K downloads/month) and scales ⌨ packages
- Learned the internals of a large existing codebase to resolve issues, submit bug fixes, add new features, write tests, and update documentation to provide better functionality for user-defined scales, themes, and aesthetics manipulation during data visualization in R.

**GOOGLE** | Quantitative Analyst Intern • GeoDataAnalytics
May 2016 – Aug 2016 | Mountain View, CA
- Explored impressions data for millions of features in the Google Maps database using Dremel, R
- Assessed average time to impressions maturity for novel business features using hazard models.
- Fit mixed effect regression models and evaluated model capacity for predicting impressions of novel business features in 4 cities across US and India based upon spatial relations with mature features

## RESEARCH

**Graduate Student Researcher | UC Berkeley**
- Combined, cleaned, & analyzed time series data from 39 collared elephants, 2M cleaned GPS samples.
- Developed an R shiny application for updating spatial risk maps of infectious disease using rare events logistic regression & spatial libraries in Python and R.
- Built spatiotemporal models estimating disease prevalence and spread using a hierarchical Bayesian framework in WinBUGs and R.

**Southwest Alberta Montane Research Project**
- Designed database and analysis flow for foraging & movement data from 182 radio-collared elk - totaling 856K cleaned GPS samples.
- Implemented multivariate regression analyses in R, including mixed negative binomial regression and paired conditional logistic regression

## TEACHING

**Visiting Instructor | Hong Kong University**
January 2018 | Movement Ecology in R Workshop
Co-developed and led an 8-day workshop teaching ecological methods of spatial and movement analysis in R & RStudio. 🌐 ⌨

**Data Science Instructor | UC Berkeley**
Fall 2017 ESPM 157 • Spring 2018 ESPM 288
Taught upper division course teaching collaborative & reproducible data science including programming in R & RStudio, relational databases, data management, version control, remote data and APIs, cloud computing, & R Markdown. 🌐 ⌨

**Biostatistics Instructor | UC Berkeley**
Fall 2015 ESPM 173
Taught upper division biostatistics course including basic hypothesis testing, probability, experimental design, linear models, and programming in R & RStudio.