

## Collin J. Schwantes

**Summary** Technically savvy data librarian with a record of fluidly working on multiple large projects. Knows how to collaboratively build technical capacity around data-centric processes to achieve desired results.

Research	Communication	Programming
Data Modeling	Live Demonstrations	R
Geospatial Analytics	Technical Guides	Javascript
Graph Analytics	Data Visualization	Python
Knowledge management	Public Speaking	SQL

**Professional Experience** **Data Librarian** - *EcoHealth Alliance - Remote - Washington D.C.*  
*2021-Present*

- Build and support the culture, infrastructure, skills, and strategies necessary to have collaborative, reproducible, and open science be the norm at EcoHealth Alliance.
- Create, curate, and teach a collection of materials on cutting edge research reproducibility tools and FAIR/CARE practices, including a comprehensive curriculum for using Airtable.
- Lead the transformation of data management by developing strategic plans, emphasizing flexible planning at the project level, assessing training needs, evaluating training efficacy, and creating integrated and collaborative systems that unify laboratory, field, and qualitative data streams across multiple international institutions in different resource settings.
- Write software in R, Javascript, and Python to facilitate open research. Including extending the `airtable` R package to better leverage new features in Airtable API.
- Connect research teams and software engineering via strategically guided technical solutions.
- Provide on-demand technical support across multiple projects for software testing, automated data curation, data integration, data imputation, geospatial analyses, and graph analytics.

**Data Scientist** - *Accenture Federal Services - Washington D.C.*  
*2019-2021*

- Rapidly develop and deploy data science applications to solve analytics problems for the United States government. Present applications to stakeholders, adapting communications to the audience as needed.
- Data Science Craft lead. Help data scientists within the Discovery Lab thrive by connecting them with resources, building best practices, and creating a supportive development community.
- Lead COVID-19 modeling efforts. Develop and deploy near real time forecasting models, phase classification algorithms based on CDC guidance, and a network based COVID-19 office simulation. These products provided essential information via cloud based solutions to leadership at three major government agencies and two fortune 500 companies.
- Data visualization expert who uses human centered design techniques to generate insightful and ergonomic tools for exploring data.
- Developed an R-python hybrid application to improve search results and usability of contracting documents with completeness and quality issues. The application uses a semantic search based on the BERT algorithm and a graph database to overcome the inconsistencies in the underlying documents.

- Lead Graph Analytics Community of Interest. Build and nurture expertise in graph analytics and semantic data with colleagues across Accenture Federal Services, leading directly to business applications of advanced graph analytics methods.

**Biosurveillance Scientist** - *Accenture Federal Services - Washington D.C.*  
2016-2021

- Champion reproducible research best practices, build technical capacity among colleagues, and drive client-centric change management effort that resulted in frequent requests for products from senior leadership.
- Integrate open source health surveillance data from multiple jurisdictions to provide situational awareness for emerging infectious diseases in animals, plants, and people.
- Lead geospatial analysis efforts, train team members to use GIS systems, and provide subject matter expertise on geospatial data standards to ensure interoperability of systems developed by the client.
- Write flexible programs in R to parse unstructured or semi-structured text and image based data for use in analyses. This improves reproducibility of analyses, facilitates data sharing, and reduces person hours dedicated to data entry.
- Produce data visualizations used in in-depth reports, communications materials, and congressional/leadership briefings.
- Test prototype applications in multiple spaces including epidemiological forecasting and natural language processing of medical text.

**Research Assistant** - *University of Colorado Boulder - Boulder, Colorado*  
2013-2015

- Collected, integrated, and analyzed biological data, remotely sensed agricultural data, and infrastructure data in R and ArcGIS while managing and mentoring 10 undergraduate research technicians.
- Presented data at four professional conferences and created figures for USDA reports.
- Created fully digitized collection of over 20,000 insects.

**Graduate Teaching Assistant** - *University of Colorado Boulder - Boulder, Colorado*  
2014

- Graduate level course on pedagogy that covered modes of communication, learning types, active listening, content development, assessment, and evaluation.
- Taught three sections of introductory biology laboratory with 30 students each.

**Education Master of Arts Ecology and Evolutionary Biology**

University of Colorado Boulder - 2013-2015

**Bachelor of Science Evolutionary Biology, Spanish Linguistics, Zoology**

University of Wisconsin Madison - 2006-2011

**Professional Certifications IC Agile Certified Professional**

Accenture Agile Institute - 2016