

Dominic Bordelon

dominic.bordelon@gmail.com | <https://dojobo.github.io/>

Summary

Versatile and creative data professional with a unique background in library sciences, blending self-taught technical expertise in R, Python, and SQL with a rich humanistic education. Experienced in investigating a wide array of analytic questions, ranging from company operational statistics to scientific publication trends and consultative support of research in fields like social science, history, and biomedical sciences, typically working with PhD-level experts. Demonstrated initiative in designing and implementing innovative technical solutions, including library-lendable Arduino DIY-electronics kits for the Baton Rouge public, an HTTP API-based intranet service, and a free, weekly drop-in tutoring service for R. Combining technical acumen with a strong client-focused approach, I am poised to bring a unique blend of creativity, empathy, and analytical skill to a dynamic Data Analyst role.

Skills

Computer programming: R, Python, SQL, HTML, CSS, HTTP (Web APIs), Git and GitHub, developing application code (previously PHP, JavaScript)

Data Analysis and Visualization: exploratory data analysis, statistical modeling, machine learning, plots for presentation

Data Management and Consultation: information needs analysis, cultural competency, ethnographic interviewing, data modeling, data cleaning/munging, data integration, data validation, technical writing

Languages: English, Spanish, German

Relevant Experience

Research Data Librarian, University of Pittsburgh – Pittsburgh, PA Nov 2019 – present

- Developed and conducted workshops on R for medical students and Social Work faculty (for example), focusing on data visualization and statistical analysis, enhancing their research capabilities. (321 participants in 2023)
- Provided expert consultation to researchers for data analysis, including troubleshooting, data restructuring, and tool selection, thereby improving research quality and efficiency. (78 consultations in 2023)
- Mentored undergraduate industrial engineering students on a predictive analytics project using census data to forecast local gentrification trends, fostering practical data application skills.
- Supported biomedical and social science data usage for academic research, contributing to successful course outcomes and research publications.
- Conducted in-class workshops for students of professorial faculty, enabling students to effectively utilize data in their academic projects.

Library Technology Specialist, European Southern Observatory–Garching, Germany Oct 2015–Oct 2019

- Managed and analyzed organizational data related to scientific publications, utilizing it to assess and report on scientific impact, supporting strategic decision-making.

- Developed and maintained application code for data curation processes, ensuring efficient ingestion, annotation, and publication of data records.
- Crafted SQL queries to generate insightful reports for stakeholders, aiding in data-driven decision-making processes.
- Designed and implemented data visualizations to represent publication data trends, facilitating easy comprehension of complex data sets.
- Collaborated in research teams to explore facility publication trends, contributing analytical expertise to interdisciplinary projects.
- Created and maintained dashboards for administrative and departmental resource allocation, optimizing operations and enhancing efficiency.

Computer Services Librarian, E. Baton Rouge Parish Library – Baton Rouge, LA May 2014 – Sept 2015

- Automated the collection and centralization of system statistics from 14 locations into a relational database, significantly enhancing data accuracy and accessibility for analysis.
- Spearheaded the migration of the organization's financial data to a centralized relational database with an offsite backup schema, improving data security and integrity.
- Contributed to the data infrastructure development, enabling more efficient statistical collection and reporting, and minimizing risks associated with data loss.

Education

Graduate Certificate in Applied Data-Driven Methods – University of Pittsburgh Expected Fall 2024
Relevant courses: Managing, Querying, and Preserving Data; Applied Predictive Modeling

Master of Library and Information Science – Louisiana State University 2013

Bachelor of Arts, Spanish – Louisiana State University 2008

Bachelor of Arts, History – Louisiana State University 2008

Bachelor of Arts, English, concentration: Writing & Culture – Louisiana State University 2007

Carpentries Certified Instructor – The Carpentries 2020

Selected Publications

Kerzendorf, W. E., Patat, F., Bordelon, D., van de Ven, G., & Pritchard, T. A. (2020). Distributed peer review enhanced with natural language processing and machine learning. *Nature Astronomy*.
<https://doi.org/10.1038/s41550-020-1038-y>

Patat, F., Boffin, H. M. J., Bordelon, D., Grothkopf, U., Meakins, S., Mieske, S., & Rejkuba, M. (2017). The ESO Survey of Non-Publishing Programmes. *The Messenger*, 170, 51–57.
<https://doi.org/10.18727/0722-6691/5055>

Leibundgut, B., Bordelon, D., Grothkopf, U., & Patat, F. (2017). Scientific Return from VLT instruments. *The Messenger*, 169, 11–15. <https://doi.org/10.18727/0722-6691/5032>