CONTACT
INFORMATION

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PROFESSIONAL
EXPERIENCE

The Center for Investigative Reporting, Emeryville, California

Data reporter   Jan 2019 – now

I alternate between partnering with reporters and working on my own investigations, but my responsibilities are always a mixture of shoe-leather and data reporting, including:

- Making (and appealing, and only once having to sue for) public records requests at every level of government
- Conducting interviews, both for reporting and for radio production
- Analyzing civil and criminal court documents
- Retrieving data programmatically via APIs or web scraping
- Cleaning and transforming data with Python primarily, SQL occasionally
- Performing statistical analyses (typically descriptive, though sometimes inferential) in pandas and SciPy
- Visualizing data both for reference and for public-facing graphics using Adobe Illustrator and scripting with matplotlib and Vega-Altair

At the risk of breaching hyperlink conventions, I've typeset technologies I've used in red to demarcate them while organizing them in the context of how they were applied.

The Oregonian, Portland, Oregon

Data editor   Sep 2016 – Dec 2018

I collaborated on projects across the newsroom to source, analyze and visualize data. My team and I managed a server for standalone project pages, so I learned some Linux system administration and set up Postgres. I established a GitHub workflow for the team and occasionally taught workshops on Git. I advised on data visualization approaches for both interactive and static graphics, and produced graphics using any combination of Python, D3.js, CartoDB, DataWrapper, Tableau, Adobe Illustrator, and Adobe Photoshop depending on need.

Simple Bank, Portland, Oregon

Data engineer   Feb 2015 – Sep 2016

I contributed to Shiftmanager, open source admin tools for Redshift in Python. I wrote other Python, SQL and limited Scala for Redshift and Postgres extraction/transformation/load processes. I wrote logic for a transaction search interface with Clojure and the Elasticsearch API.

Periscopic, Portland, Oregon

Data analyst   Dec 2013 – Feb 2015

I cleaned and normalized government and private datasets using Python (primarily pandas), including FBI homicide data to update guns.periscopic.com. I used Gephi to explore configurations for a network graph depicting relationships between factors in breast cancer causation for UCSF. I used both the GNIP and Twitter APIs for interactive tools. I most frequently performed exploratory data analysis.

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You can find more detailed descriptions of projects sorted chronologically on my website here, and filtered by tags like "graphics" here.

EDUCATION

Reed College, Portland, Oregon
B.A., Psychology
Focus: neuroscience, electroencephalography

ACADEMIC
EXPERIENCE

Reed College, Portland, Oregon
Student researcher, S.C.A.L.P. lab

Replicated an electroencephalography (EEG) experiment for the Center for Open Science and my undergraduate thesis. Collected behavioral and phyisological data and analyzed it using first Stata, then R and Python. Assisted in experimental design for investigations in visual perception and cognition.

Oregon Health & Science University School of Medicine, Portland, Oregon
Research assistant, Matthew Lattal lab

Assisted with running experiments (largely behavioral testing assays). Performed brain slicing for immunohistochemical analyses, tissue staining, and surgeries (*e.g.* cannulation). Coverslipped slides, prepared solutions, and performed lab and equipment maintenance.

PRESENTATIONS AND
PUBLICATIONS

Technical Reviewer, *Mining Social Media* by Lam Thuy Vo. No Starch Press, 2019.

Technical Reviewer, *Interactive Data Visualization for the Web: An Introduction to Designing with D3* (Second edition) by Scott Murray. O'Reilly, 2017.

Technical Reviewer, *Think Python* (Second edition) by Allen Downey. O'Reilly, 2016.

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Designer, "The Science Gender Gap," featured in:

The Best American Infographics 2015. Houghton Mifflin Harcourt, 2015.

The Scientific American website (interactive, saved via Internet Archive): https://web.archive.org/web/20221207220131/https://www.scientificamerican.com/article/how-nations-fare-in-phds-by-sex-interactive1/.

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Open Science Collaboration. "Estimating the Reproducibility of Psychological Science." Science, vol. 349, no. 6251, Aug. 2015, https://doi.org/10.1126/science.aac4716.

Lewis, M. & Pitts, M. (2013). On the practice of replicating an electrophysiology study with the Center for Open Science. Poster presented at the Society for Neuroscience (SfN) Annual Meeting, November, San Diego, California. https://osf.io/jret9

Lewis, M. & Lattal, K.M. (2012). Trial and intertrial duration effects in extinction of cocaine-induced conditioned place preferences. Poster presented at the Oregon Chapter Society for Neuroscience (SfN) Annual Meeting, April, Troutdale, Oregon.