# RICH PAULOO

I have coded workflows that stream real-time data from remote sensor networks, built dashboards to bring clarity to massive datasets, developed physical simulation models of groundwater flow and contaminant transport models, made visualizations to improve machine learning interpretability, and built R packages.

I am currently searching for positions where I can work on technical, challenging, data-intensive problems for the betterment of society.



## **EDUCATION**

2020 2015 PhD. Candidate, Hydrogeology

University of California Davis

- O Davis, CA
- · Regional scale physical simulation modeling of groundwater flow and contaminant transport.
- · Elected graduate group representative in the Graduate Student Assembly.
- · National Science Foundation fellow.

2011 2006 B.S., Integrative Biology (minor in Conflict Resolution)

University of California Berkeley

Parkeley, CA



### CONTACT

- □ richpauloo@gmail.com
- ▼ RichPauloo
- github.com/richpauloo

LANGUAGE SKILLS

- frichpauloo.com
- **J** (415) 275-4981

SQL

# SELECTED POSITIONS

2020 2015

**Graduate Student Researcher** 

Fogg Lab

O UC Davis

- · Primarily work with large hydrologic datasets, numerical groundwater flow and contaminant transport models, and network optimization models.
- · Developed methods to efficiently upscale anomalous contaminant transport in heterogeneous porous media thus informing regional scale groundwater quality modeling.
- · Regularly use R, Python, Git, Bash, MODFLOW, RW3D, Paraview, Illustrator, AWS, Linux, ArcGIS, Envi, LaTeX.

2019 2018 Davis Data Lab Researcher

Computational Institute for Geodynamics (CIG)

**Q** UC Davis

- · NLP, text mining, and network analysis in R on a corpus of ~600 PDFs.
- · Developed an R Shiny dashboard to understand the corpus.
- · Results published here.

## **FOREIGN LANGUAGE** SKILLS

Conversational Spanish

# ■ SELECTED WRITING

2019

Assessing Impact of Outreach through Software Citation for Community Software in Geodynamics

Computing in Science & Engineering, PP. 1-1. 10.1109/MCSE.2019.2940221.

· Hwang, L. & Pauloo, R. & Carlen, J.

2019

Domestic Well Vulnerability to Drought Duration and Unsustainable Groundwater Management in California's Central Valley

Under-Review (copy available upon request.)

· Pauloo, R. & Dahlke, H. & Escriva-Bou, A. & Fencl, A. & Guillon, H. & Fogg, G.E.

2019

Anthropogenic Basin Closure and Groundwater SALinization (ABCSAL): An Unrecognized Threat to Water Quality Sustainability

Under-Review (copy available upon request.)

· Pauloo, R. & Fogg, G.E. & Guo, Z.

## MORE INFO

See full CV at richpauloo.com/cv for more complete list of positions and publications.

Made w/ pagedown. Source code: github.com/richpauloo/cv. Last updated on 2019-11-19.