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, 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

PhD. Candidate, Hydrogeology
University of California Davis

2020 | 2015

📍 Davis, CA

- 3D physical simulation of groundwater flow & solute transport.
- NSF fellow in Climate Change, Water, and Society IGERT.
- Elected representative in the Graduate Student Assembly.
- Built groundwaterstatement.org, signed by over 1,000 groundwater experts worldwide.

B.S., Integrative Biology (minor in Conflict Resolution)
University of California Berkeley

2011 | 2006

📍 Berkeley, CA

- Delivered departmental commencement speech to ~ 5,000 people.

💼 SELECTED POSITIONS

Graduate Student Researcher
Fogg Lab

2020 | 2015

📍 UC Davis

- Work with large hydrologic datasets, numerical groundwater flow and contaminant transport models, & network optimization models.
- Developed novel models of well failure, groundwater salinization, and contaminant transport in porous media.
- Regularly use R, Python, Git, Bash, MODFLOW, RW3D, Paraview, Illustrator, AWS, Linux, ArcGIS, Envi, LaTeX.

Data Lab Researcher
Computational Institute for Geodynamics (CIG)

2019 | 2018

📍 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.

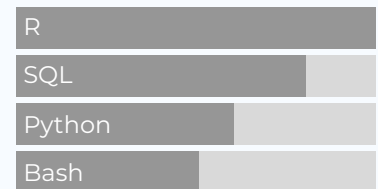## 📰 SELECTED WRITING

A low cost, open source wireless sensor network for real-time groundwater monitoring
Water, 10.3390/w12041066

2020

- Calderwood, A. & **Pauloo, R.** & Yoder, A. & Fogg, G.E.

Domestic Well Vulnerability to Drought Duration and Unsustainable Groundwater Management in California's Central Valley
Environmental Research Letters, 10.1088/1748-9326/ab6f10

2020

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

Assessing Impact of Outreach through Software Citation for Community Software in Geodynamics
Computing in Science & Engineering, 10.1109/MCSE.2019.2940221

2019

- Hwang, L. & **Pauloo, R.** & Carlen, J.

CONTACT

✉ richpauloo@gmail.com
🐦 RichPauloo
github.com/richpauloo
🔗 richpauloo.com
📞 (415) 275-4981

LANGUAGE SKILLS

R	
SQL	
Python	
Bash	

FOREIGN LANGUAGE SKILLS

Conversational Spanish

MORE INFO

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