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

2020 | 2015

University of California Davis

📍 Davis, CA

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

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

2011 | 2006

University of California Berkeley

📍 Berkeley, CA

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

💼 SELECTED POSITIONS

Graduate Student Researcher

2020 | 2015

Fogg Lab

📍 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

2019 | 2018

Computational Institute for Geodynamics (CIG)

📍 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.

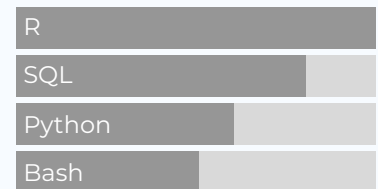## 📖 SELECTED WRITING

A low cost, open source wireless sensor network for real-time groundwater monitoring

2020

Water, 10.3390/w12041066

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

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

2020

Environmental Research Letters, 10.1088/1748-9326/ab6f10

- **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

2019

Computing in Science & Engineering, 10.1109/MCSE.2019.2940221

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

CONTACT

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📞 (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.