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
📍 Davis, CA

2020 | 2015

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

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

2011 | 2006

💼 SELECTED POSITIONS

Graduate Student Researcher
Fogg Lab
📍 UC Davis

2020 | 2015

- 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.

Davis Data Lab Researcher
Computational Institute for Geodynamics (CIG)
📍 UC Davis

2019 | 2018

- 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

Assessing Impact of Outreach through Software Citation for Community Software in Geodynamics
Computing in Science & Engineering. PP. 1-1. 10.1109/MCSE.2019.2940221.

2019

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

Domestic Well Vulnerability to Drought Duration and Unsustainable Groundwater Management in California's Central Valley
Under-Review (copy available upon request.)

2019

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

Anthropogenic Basin Closure and Groundwater SALinization (ABCSAL): An Unrecognized Threat to Water Quality Sustainability
Under-Review (copy available upon request.)

2019

- **Pauloo, R.** & Fogg, G.E. & Guo, Z.
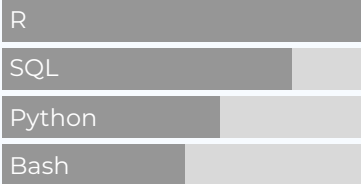
CONTACT

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- ⌨ 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.