Rich A. Pauloo

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EDUCATION

University of California, Davis, Ph.D. candidate Physical Hydrology   expected 2020
University of California, Berkeley, B.S. Biology & minor in Conflict Resolution   2011

EMPLOYMENT

University of California, Davis:

Graduate Student Researcher	2015–present
NSF IGERT Fellow in Climate Change, Water, and Society	2015–2017
U.S./China Clean Energy Research Center Researcher	2015–present
Data Science Initative Affiliate	2017–present
UC Water Graduate Researcher	2017–present
Graduate Student Assembly Representative	2016–present

National Geographic Student Expeditions:

Expedition Leader (Thailand)	2016

NatureBridge, Yosemite National Park & Golden Gate National Recreation Area:

Site Manager	2014–2015
Environmental Science Educator	2013–2014

San Mateo County Office of Education:

Environmental Science Educator	2012–2013

University of California, Davis:

Biological Science Technician	2012

GRANTS & AWARDS

- **2018** *Best Innovative Tool Development*, UC Water Annual Meeting

- **2018** *CA Water Data Challenge Winner*, 2018 CA Water Data Challenge [project] **($1,500)**

- **2018** *Data Visualization & Digital Storytelling Runner Up*, NASA [project] **($1,400)**

- **2018** *Early Career Data Science Researcher Award*, West Big Data Hub **($1,000)**

- **2016** *NSF-GRFP Honorable Mention*, National Science Foundation

- **2015** *NSF-IGERT in Climate Change, Water, and Society*, National Science Foundation **($111,000)**

PUBLICATIONS IN PROGRESS

Journal Articles

Pauloo, R., Z. Guo, G.E. Fogg 2019. "Groundwater Salinization Resulting from Open-to-Closed Basin Conversion in an Agricultural Basin." *Advances in Water Resources (not yet submitted)*

Pauloo, R., C. Henri, Z. Guo, G.E. Fogg 2019. "Upscaling Regional, 3D, Non-Fickian Solute Transport with 2D Equivalent Models." *Water Resources Research (not yet submitted)*

Pauloo, R., A. Escriva-Bou, A. Fencl, H. Guillon 2019. "Domestic Well Vulnerability to Drought in California's Central Valley: Past and Future." *Regional Environmental Change (not yet submitted)*

PRESENTATIONS

2018. Pauloo, G.E. Fogg, R., Z. Guo, C.V. Henri "Upscaling Regional, 3D, Non-Fickian Solute Transport with 2D Equivalent Models." American Geophysical Union. Final Paper Number H43I-2765. Washington, DC. 13 Dec.

2018, Pauloo, R. "An Interactive Mapping Interface to the California Online State Well Completion Report Database" UC Water Annual Meeting. Sacramento, CA. 25 Oct.

2018, Pauloo, R., A. Escriva-Bou, A. Fencl, H. Guillon "Domestic Well Vulnerability to Drought in California's Central Valley" California Water Data Challenge Awards Summit. Los Angeles, CA. 18 Oct.

2018. Pauloo, R., A. Escriva-Bou, A. Fencl, H. Guillon "Data-Driven Prediction of Domestic Well Failure in California, and Forecasting Future Well Failure with Machine Learning Models" CA Water Data Summit. Los Angeles, CA. 23 Sept.

2018. Pauloo, R. "Regional Groundwater Quantity and Quality Models" Stanford University. Palo Alto, CA. 24 May.

2017. Pauloo, G.E. Fogg, R., Z. Guo, C.V. Henri "Basin Scale Groundwater Quality Management Modeling: Methods to Upscale the Advection Dispersion Equation." American Geophysical Union. Final Paper Number H51G-1360. New Orleans, LA. 14 Dec.

2017. Pauloo, R., G.E. Fogg, E. Goharian, J.D. Herman "How to Maximize Total Water Storage in California." UC Water Annual Retreat. Davis, CA. 21–22 Sept.

2016. Pauloo, R., G.E. Fogg, Z. Guo "Water Resource Vulnerability to Groundwater Salinization in Closed Basin Aquifers." American Geophysical Union. Final Paper Number H33F-1610. San Francisco, CA. 14 Dec.

2016. Pauloo, R., G.E. Fogg, Z. Guo "Investigating Groundwater Sustainability and Water Quality Degredation in California's Tulare Basin using a Simple Mixing Model." Groundwater Resources Association Annual Meeting. Concord, CA. 28 Sept.

2016. Pauloo, R., G.E. Fogg, Z. Guo "Groundwater Salinization due to Hydraulic Closure in Tulare Basin over long time scales." Toward Sustainible Groundwater in Agriculture. Burlingame, CA. 28 June.

2015. Pauloo, R., P. Marielle "The Past Present and Future: Long-term climate trends and water management history in California." Water Scarcity in the West: Past Present and Future. Davis, CA. 12–13 April.

ORGANIZATION & LEADERSHIP

Team Lead, California Water Data Challenge, May - Oct. 2018 Domestic Well Vulnerability to Drought in California's Central Valley

Session Co-Chair, American Geophysical Union, Dec. 2016. Integration of Climate, Hydrology, Social Science, and Water Management: Connecting Hydroclimate Models with Stakeholder Need

Conference Co-Organizer, April 2016. Weathering Change: Impact of Climate Change and SGMA on CA Water

PROFESSIONAL AFFILIATIONS

- American Geophysical Union

- Groundwater Resources Association

- International Association of Hydrogeologists

TRAINING

ANALYSIS & SOFTWARE

- Stanford ICME Summer School in Machine and Deep Learning, 2018.

- Software Carpentries Intructor, 2018.

- Eawag Summer School in Mathmateical Modeling of Environmental Systems. Dubendorf, Switzerland. June, 2017.

- C2VSim training, San Luis Obsispo, CA. April, 2016.

WATER

- Contemporary Groundwater Issues Council. May, 2017.

- C2VSim training, San Luis Obsispo, CA. April, 2016.

- Drought Tour, California Water Education Foundation, September, 2015.

- Groundwater Tour, California Water Education Foundation, September, 2015.

OTHER

- First Responder (NOLS) - certification valid through June 2019.

COMMUNICATION & OUTREACH

- Personal webpage

LANGUAGES

- Spanish (conversational)

- Portuguese (elementary)

REFERENCES

Available upon request