Stanford

Jose Bolorinos

Postdoctoral Scholar, Civil and Environmental Engineering

Curriculum Vitae available Online

Bio

BIO

Jose Bolorinos is a Postdoctoral scholar in Civil and Environmental Engineering. Jose received his PhD in Civil and Environmental Engineering (Atmosphere & Energy) and an M.S. in Statistics at Stanford. Jose's research focuses on data-driven, systems-level strategies for coordinating urban water and energy supply infrastructure. As part of this work, he has investigated policy approaches that better understand and manage the lifecycle impacts of the energy sector on watersheds, air quality, and carbon emissions. Jose has also developed closed-loop customer monitoring and segmentation tools that allow water and electricity utilities to quickly track the responses of their customers to demand shocks inside and outside of their service areas. Currently, he is developing data-driven methods for optimal design and operation of energy storage in the wastewater treatment sector. His work has been featured at the California Data Collaborative, Stanford's Big Earth Water Hackathon, and AI for Climate Change Initiative.

Prior to coming to Stanford, Jose worked as a data scientist for a healthcare consultancy subcontracted by the federal government to manage its Medicare and Medicaid claims databases. Jose received a B.A. in Economics from UC Berkeley and an M.S. in Environmental Engineering and Science from Stanford University. He was part of the start up operations team at the Bill & Cloy Resource Recovery Center, an experimental, pilot-scale wastewater treatment facility launched recently on the Stanford campus to accelerate innovative approaches to wastewater treatment.

STANFORD ADVISORS

- Meagan Mauter, Postdoctoral Faculty Sponsor

Publications

PUBLICATIONS

- **Integrated Energy Flexibility Management at Wastewater Treatment Facilities.** *Environmental science & technology*
  Bolorinos, J., Mauter, M. S., Rajagopal, R.
  2023
- **Do water savings persist? Using survival models to plan for long-term responses to extreme drought** *ENVIRONMENTAL RESEARCH LETTERS*
  Bolorinos, J., Rajagopal, R., Ajami, N. K.
  2022; 17 (9)
- **Global Changes in Electricity Consumption During COVID-19.** *iScience*
  Buechler, E., Powell, S., Sun, T., Astier, N., Zanocco, C., Bolorinos, J., Flora, J., Boudet, H., Rajagopal, R.
  2021: 103568
- **Use of trihalomethanes as a surrogate for haloacetonitrile exposure introduces misclassification bias.** *Water research X*
  Furst, K. E., Bolorinos, J., Mitch, W. A.

2021; 11: 100089

- **Mining the gap in long-term residential water and electricity conservation** *ENVIRONMENTAL RESEARCH LETTERS*
  Bolorinos, J., Rajagopal, R., Ajami, N. K.
  2021; 16 (2)

- **Consumption change detection for urban planning: monitoring and segmenting water customers during drought** *Water Resources Research*
  Bolorinos, J., Ajami, N. K., Rajagopal, R.
  2020; 56 (3)

- **Evaluating Environmental Governance along Cross-Border Electricity Supply Chains with Policy-Informed Life Cycle Assessment: The California-Mexico Energy Exchange.** *Environmental science & technology*
  Bolorinos, J. n., Ajami, N. K., Muñoz Meléndez, G. n., Jackson, R. B.
  2018

- **Balancing marine ecosystem impact and freshwater consumption with water-use fees in California's power markets: An evaluation of possibilities and trade-offs** *Balancing marine ecosystem impact and freshwater consumption with water-use fees in California's power markets: An evaluation of possibilities and trade-offs*
  Bolorinos, J., Yu, Y., Ajami, N. K., Rajagopal, R.
  2018; 226 (C): 644-654

PRESENTATIONS

- Balancing marine ecosystem impact and freshwater consumption with water-use fees in California's power markets: an evaluation of possibilities and tradeoffs - American Geophysical Union