

ENERGY AND ENVIRONMENTAL ECONOMICS, INC.

San Francisco, CA

Associate

Ye Zheng supports E3's Asset Valuation practice area. Ye joined E3 after earning her Master's degree in Civil and Environmental Engineering at Stanford University. As a Shultz fellow at the California Department of Water Resources, she conducted studies on the State Water Project's renewable energy procurement plan for reaching their net-zero energy goals. Interning at Noria Energy, she developed an optimization model for dispatching battery energy storage systems. In addition to her master's degree, Ye holds a B.S. in Civil and Environmental Engineering from the McGill University. During her undergraduate study, she cofounded sustainability organizations for coordinating food donations in China and designing and constructing footbridges for isolated communities.

CALIFORNIA DEPARTMENT OF WATER RESOURCES

Sacramento, CA

Stanford Shultz Energy Fellow

July 2023 – September 2023

- Assessed the risks of hydrology variations and renewables curtailment on State Water Project's renewable energy procurement plan; evaluate the potential quantity and cost of unbundled REC purchases considering these risks
- Evaluated the cost-effectiveness and feasibility for CDWR to consider a 24/7 free-carbon energy target using various combinations of solar, battery, wind, and DWR's hydro resources; analyzed the trade-offs between CDWR's hydro dispatchment patterns informed by the CAISO price signal, and the the benefits of procuring battery and wind resources to meet the 24/7 matrix

NORIA ENERGY

Sausalito, CA

Project Development Intern

January 2023 – June 2023

- Developed an optimization model for dispatching battery storage energy systems using Python and Julia; Created a user interface for testing solar and battery sizes on using Excel VBA
- Prepared financial models for Behind-the-Meter commercial solar and battery projects, including modeling tariff data and structures, generating and cleaning load and solar production data, and calculating tax benefits

U.S. GREEN BUILDING COUNCIL

Washington, DC

LEED Technical Development Fellow

June 2022 – December 2022

- Created a lifecycle analysis model to estimate GHG emission from building energy use and occupant transit for LEED Gold certified buildings in California; informed the allocation of credit scores on the categories of energy and transportation section of the LEED rating system
- Analyzed spatial-temporal trends in market achievement rate for Beta LEED credits under market performance testing, utilizing a dataset of over 2600 LEED certified buildings; suggested the influence of building types and locations on achievement rates for energy and transportation credits

STUDENT ENERGY

Regional Coordinator & GCoM Research Team Member

Montreal, QC
May 2020 – December 2021

- Contributed as part of a team of 12 regional coordinators in conducting a worldwide research program, the Global Youth Energy Outlook; gathered youth's perspectives on the opportunities and challenges of sustainable energy transition in their regions
- Led a team of 50 volunteers to survey over 4000 youth through social media outreach and partnership with local NGOs and educational institutes; Analyzed the survey responses and incorporating regional energy policy and technology insights in the final report
- Delivered a presentation to an Asian Development Bank Youth Initiative meeting

Education

Stanford University
M.S., Sustainable Design and Construction

Stanford, CA
June 2023

McGill University
B.S., Civil and Environmental Engineering

Montreal, QC
May 2021