

Charlie Duff

44 Montgomery Street, Suite 1500, San Francisco, CA 94104
charlie@ethree.com

415.391.5100

ENERGY AND ENVIRONMENTAL ECONOMICS, INC.

San Francisco, CA

Associate

Mr. Duff recently joined E3 after completing his M.S. in Civil and Environmental Engineering at Stanford University, and earning his B.S. in Mechanical Engineering at the University of Wisconsin. He is inspired by the climate benefits of renewable energy and holds a strong interest in participating in project work that promotes a cleaner environment in the rapidly-changing energy industry. During his graduate studies at Stanford, Mr. Duff's coursework focused on energy optimization and power systems modeling which prepared him for an internship at the California Independent System Operator (CAISO). He enjoyed working at the CAISO and saw E3 as an opportunity to do similar work but reach far beyond California. At E3, Mr. Duff is in the Planning group and will also assist the Markets group.

STANFORD UNIVERSITY

Stanford, CA

Teaching Assistant

September 2017- March 2018

- Lead office hours, lab sections, and review sessions.
- Grade tests, homework, and reports.
- Lecture on occasion and manage field trips to energy sites in California.

CALIFORNIA INDEPENDENT SYSTEM OPERATOR (CAISO)

Folsom, CA

Market Quality and Renewable Integration Intern

June 2017 - August 2017

- Analyze the grid performance during solar ramps by finding correlations with CPS1 violation.
- Provide recommendations of ramp rate design and determine effects on California's RPS goals.
- Run production simulation models to investigate the addition of other balancing authorities into the CAISO market.
- Developed tools to interpret results and ensure energy and money was correctly accounted for.

WISCONSIN ELECTRIC MACHINES AND POWER ELECTRONICS CONSORTIUM

Madison, WI

Research Assistant

December 2015 – May 2016

- Set up tests and analyze data for new electric motor design.
- Design parts on SolidWorks.
- Assemble and disassemble dynamometer.
- Replace and install equipment in electrical engineering lab.

THE BOLDT COMPANY

Madison, WI

Field Engineer Intern

May 2013 – August 2013

- Check weekly tasks and update planner schedules.
- Maintain correspondence with architect and subcontractors by writing RFIs and updating drawings.

Professional Activities

Stanford Energy Journal / Wisconsin Engineer Magazine September 2012 – March 2018
Head Editor

- Manage, edit, and write articles for the Stanford Energy Journal/Wisconsin Engineer Magazine about energy/ engineering topics locally and globally. Attend and contribute to executive meetings.

Engineers Without Borders Madison, WI
Project Assistant January 2015 – May 2016

- Seek out potential partnerships to start project, analyze the engineering cost, environmental and social aspects of the project, communicate with NGO and community, organize fundraisers, recruit members.

Education

Stanford University Stanford, CA
M.S in Civil and Environmental Engineering, Atmosphere and Energy focus March 2018

University of Wisconsin Madison, WI
B.S. Mechanical Engineering May 2016
Minor in Engineering for Energy Sustainability, International Engineering, and Mathematics

Citizenship

United States