

ENERGY AND ENVIRONMENTAL ECONOMICS, INC.
Consultant

San Francisco, CA

Ms. Davuluri joined E3's Distributed Energy Resources (DERs) group in 2019, where she helps utilities, regulatory agencies, and developers forecast the impact of building electrification and transportation electrification, analyzes the cost shifts of storage and solar incentives, and provides utilities with rate design options associated with various DERs. She joined E3 after graduating from the Massachusetts Institute of Technology (MIT), where she researched how distribution systems will adapt to increasing penetration of DERs. Ms. Davuluri brings significant international energy experience in Chile, Ghana, and India to her work helping utilities and other E3 clients evolve toward a clean energy future. In addition to her M.S. from MIT's Technology and Policy Program, Ms. Davuluri holds a B.S. in Mechanical Engineering from the University of California, Berkeley.

During her time at E3, Sruthi has been a key contributor in studies conducted for a variety of clients including regulatory agencies, utilities, project developers and investors. She has provided guidance through scenario testing on technical feasibility and economic attractiveness for microgrid designs, building electrification, transportation electrification, and incentives for solar and storage. Selected projects described below:

- Calculated and forecasted load shifts and annual peak load due to varying levels of building electrification and heat pump adoption for all 50 states. Other projects focused on building electrification impacts in Denver and California specifically for confidential clients in the public sector.
- Modeled revenue forecasts of a 100 MW/400 MWh front-of-the-meter battery energy storage system in the CAISO Market under various operational strategies and policy scenarios, which informed investment decisions made by a confidential client.
- Contributed to a Due Diligence Report on Demand Response in California for a confidential client which contributed to their decision to make a \$20 million investment.
- Built rate design calculator to support Hawaiian Electric Company with electric vehicle rate design filings, which proposed EV rates for commercial EV charging sites and led to the development of an EV infrastructure filing for the company to build make-ready EV charging infrastructure at public light-duty EV charging locations.

CENTER FOR ENERGY AND ENVIRONMENTAL POLICY RESEARCH
Research Assistant

Cambridge, MA
September 2017 – May 2019

- Developed an algorithm to perform decentralized economic dispatch in a bottom-up manner for local distribution systems with varying levels of distributed energy resources
- Analyzed detailed load data to predict which customers will have the greatest impact on reducing peak demand in New England

- Investigated the macroeconomic impact of peak demand reduction; showed that a 1% reduction in load could lead to a 1.5% - 3% reduction in electricity prices

ENEL X

Microgrid Analyst

Santiago, Chile
July 2018 – October 2018

- Evaluated and advised on Enel’s approach for designing rural microgrids by assembling a best practices report covering technical, economic, and social recommendations
- Quantified the technical and economic benefits of urban microgrids in downtown Santiago by building a simulation using electricity consumption and generation data

SOLSTICE INC.

Consultant

Cambridge, MA
September 2017 – January 2018

- Implemented machine learning algorithms to predict the probability of delinquency of utility payments using customer data, which included previous payment history and other demographic variables and demonstrated a 99% accuracy rate
- Developed a model that increased the number of Lower-to-Middle Income (LMI) applicants approved when compared to the standard industry approach

CYPRESS CREEK RENEWABLES

Development Engineer

San Francisco, CA
February 2017 – May 2017

- Produced engineering designs and estimated net-energy output for 50 local solar farms by analyzing geographic and technical constraints, which screened the financial capability of the potential solar projects

PARTICULATE SOLID RESEARCH, INC.

Research Engineer

Chicago, IL
June 2016 – August 2016

- Provided implementation guidelines for using existing mixing technology on biomass reactors by studying the fluidization properties of five distinct binary solids; findings proved the use of traditional fluidization methods on clean-energy applications

Education

Massachusetts Institute of Technology
M.S., Technology and Policy

Cambridge, MA
June 2019

University of California, Berkeley
B.S., Mechanical Engineering
Minor in Environmental Economics & Policy

Berkeley, CA
May 2017

Authored Papers

“Recursive Algorithm for Resource Allocation in Radial Network Systems” IEEE. 2018. Available online: <https://ieeexplore.ieee.org/document/8760141>.

“Enabling Customers through Distributed Economic Dispatch” IEEE North America Power Systems. 2019.

Citizenship

United States