

- Education**    **Princeton University**, Princeton, NJ    January 2006  
Ph.D., Electrical Engineering
- California Institute of Technology**, Pasadena, CA    June 2000  
Bachelor of Science, Applied Physics
- Experience**    **CA Public Utilities Commission**, Office of the President, San Francisco, CA    2011-present  
*Energy Advisor to the President*
- Big Energy Data: Leading a multi-stakeholder effort to create a statewide energy data repository to improve access, support transformational energy research, and drive innovation in energy services and products. Developed use cases from efficiency financing to building benchmarking to distribution grid planning. Convened experts in workshop on big data collection, standardization, analytics, dissemination, and anonymization.
  - Demand Response: Leading a rulemaking to develop a new market paradigm for demand response resources that can support renewables integration and system reliability.
  - Strategic Adviser: Advise President of the Commission on matters related to smart grid, electric vehicles, energy storage, research and development, transmission infrastructure.
  - Stakeholder Engagement: Represent Commission President in meetings and conferences with utilities, energy and technology companies, Legislature, local communities, federal and state agencies, and advocates.
  - Project Management: Coordinate between Governor's office, CA Independent System Operation, CA Energy Commission, Commissioner offices, judges, attorneys, technical staff.
- Accomplishments:
- California utility smart grid deployment plans
  - PG&E smart grid pilot plans for line sensors, volt/VAR optimization, detect/locate outage/faults, demand forecasting
  - White House-sponsored Green Button Connect for customer energy data access
  - Proposal to underground the first 500kV transmission line in the U.S., 3.5 miles in length
  - Electric Program Investment Charge to fund \$162 million annually for clean energy research, development, and demonstration by CA Energy Commission and utilities
  - \$150 million, 5-year research and development project on cyber security, renewables integration, gas pipeline operation, and energy usage data analytics at Lawrence Livermore National Laboratory
  - Thought Leaders Sessions on big energy data and new technology to meet CA energy goals
- Syncrity, LLC**, San Francisco, CA    2012-present  
*President, Co-founder*
- Information technology display tools to support group consensus decision-making.
  - Software used by Intel International Science and Engineering Fair for 9 years. Supports award selection by 800 judges in 17 categories during caucusing of 1,200 projects each year. Proven to cut decision-making time in half. Higher satisfaction from judges with award results.
  - Responsible for contract negotiation, marketing, business development, and hiring.
- U.S. Dept. of Energy**, Office of Policy Analysis, Washington, DC    2005-2011  
*Senior Economist*
- Developed DOE's quantitative policy analysis capability to fulfill White House requests.
  - Conducted analysis of Waxman-Markey climate change mitigation bill and Clean Energy

- Standard for White House strategy and State of the Union speech.
- Studied the impact of the Renewable Fuel Standard and Low Carbon Fuel Standard on global oil and biofuel markets. Used as evidence in EPA rulemakings.
- Directed team of Brookhaven National Laboratory energy modelers.
- Presentations to top DOE decision-makers.

**Kennedy School of Government, Harvard University, Cambridge, MA** 2009-2011

*Research Fellow*

Energy Research, Development, Demonstration & Deployment (ERD3) Policy project.

- Publication of 8 articles, reports, and papers.
- 100 experts elicitation across 7 energy technologies, modeled in 15 scenarios.
- Convened top 30 U.S. and European nuclear experts for workshop on future of nuclear.

**Massachusetts Department of Energy Resources, Boston, MA** 2010

*Fellow, Global Warming Solutions*

- Managed quantitative analysis for Massachusetts Clean Energy and Climate Plan for 2020.
- Inventoried a portfolio of nearly 30 policies across 4 sectors.

**International Energy Agency (IEA), Economic Analysis Division, Paris, France** 2007

*Economist*

Co-author of the World Energy Outlook 2007 - China and India Insights.

**Innov-X Systems, Inc., Woburn, MA** 2004-2005

*Research and Development Scientist*

**Federation of American Scientists, Washington, DC** Summer 2003

Low-cost, earthquake-safe, energy-efficient housing technologies.

**Intel Corporation, Hillsboro, OR** Summer 1999, 2000

**Stanford Linear Accelerator Center, Menlo Park, CA** Summer 1998

**Mentoring, Leadership, Professional Service** Member, Bay Area Rapid Transit Title IV/Environmental Justice Policy Advisory Committee  
 Board and Commissions Leadership Institute Fellow, Urban Habitat, 2012-2013  
 Mentor, MentorNet, for minority graduate students in science and engineering, 2006-present  
 Fellow, From Harvard Square to the Oval Office: A Political Campaign Practicum, 2010-2011  
 Captain, Mentor, Caltech Women's Collegiate Tennis Team, 1997-2000

**Awards** U.S. Presidential Management Fellowship, 2005-2007  
 President's Fellowship, Princeton University, 2000  
 Most Inspirational Player Award – Caltech Women's Tennis Team, 1999, 2000  
 Scholar-Athlete Award – Southern California Inter-Collegiate Athletic Conference, 2000

**Languages** Some knowledge of Spanish, French, and Mandarin Chinese