Ben Gould

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EDUCATION

University of California, Berkeley

Berkeley, CA

Master of Public Policy, M.S. in Environmental Engineering

Expected May 2017

<u>Awards</u>: NSF Research Traineeship in Data Science for the 21st Century, Civil & Environmental Engineering Department Fellowship

<u>Relevant Courses</u>: Design for Sustainable Communities, Air Quality Engineering, Technologies for Sustainable Societies, Economics of Public Policy Analysis

University of California, San Diego

San Diego, CA

B.S., General Biology

June 2013

Awards: Gordon Engineering Leadership Scholar

Select Courses: Energy Econ, Renewable Energy, Environmental Law, Engineering Leadership

PROFESSIONAL EXPERIENCE

Research Intern

May 2015–August 2015

The International Council on Clean Transportation

San Francisco, CA

- Built a full-stack web application using d3, Node.js, and jQuery to generate interactive visualizations of modeled global transportation emissions.
- Co-authored a policy analysis white paper to understand successes and failures from Brazil's P-7 (Euro V) implementation for heavy-duty trucks.

Research Associate

June 2013 – August 2014

Lawrence Berkeley National Laboratory

Berkeley, CA

- Developed a microelectromechanical sensor for monitoring of airborne particulate matter (PM) mass concentrations, intended for widespread deployment via wireless sensor networks to improve regulation and public health. Carried out research efforts focusing on particle size selection, sensitivity improvements, and further miniaturization of the sensor.
- Modeled fluid flow and particle behavior in COMSOL, tested models with fabricated prototypes, and developed and performed experiments to evaluate responsiveness of sensing element to environmental variables (temperature and humidity) as well as PM.
- Rewrote a 2,000-line custom data collection program using Visual Basic to improve ease of use, increase data collection, and streamline program operation for a 1970s-era instrument.
- Listed as first or second author on seven conference posters and presentations, including presentations to the EPA and the American Association for Aerosol Research; and supervised an undergraduate summer intern.

LEADERSHIP EXPERIENCE

President and Co-Founder

August 2014 - present

Engineers for a Sustainable World (ESW) at Berkeley

Berkeley, CA

- Leading a 40-person student organization dedicated to implementing local sustainability projects.
- Launched 10 projects, hosted 8 speakers in a series on Sustainability Careers, led a weekly seminar on engineering leadership, and raised \$8,300 for organizational & travel funding in the first year.

• Awarded Outstanding Chapter (ESW) and Outstanding New Student Org (UC Berkeley).

Director of Chapter Relations – West

July 2012 – June 2013

Engineers for a Sustainable World National Team – Board of Directors

San Diego, CA

- Spearheaded the development of a five-year strategic plan and led efforts to register as a nonprofit 501(c)(3) corporation.
- Restructured the National Team, increasing the number of weekly meetings from 1 to 9, and increasing attendance at each meeting from 50% to 90%.
- Advocated for chapter's interests on the Board of Directors. Communicated monthly with 32 student chapters nationwide.

Vice President of Project Management

October 2011 – April 2012

Engineers for a Sustainable World at UC San Diego

San Diego, CA

- Improved chapter's efficiency by clearly defining responsibilities and goals, improving and restructuring leadership structure, and rewriting chapter bylaws.
- Led chapter through a major growth period enabled by restructuring, doubling in size (from 30 to 60 members, 7 to 13 projects, and from 1 to 3 events per quarter) and becoming 4x more ambitious (from \$10k projects to \$40k projects, and from 20-person campus events to 100-person regional and national events) within 6 months of restructuring.

Project Leader

October 2010 – April 2012

Engineers for a Sustainable World at UC San Diego

San Diego, CA

- Recruited and led two 10-person interdisciplinary student teams to develop and implement environmental engineering projects to address water, food, and sanitation challenges.
- Developed a solar-powered mobile aquaponics system to sustainably grow plants and fish, now used to educate high school students in environmental science; and designed an anaerobic biogas digester for waste biomass, as a source of cooking fuel for impoverished villages in rural Thailand.
- Wrote 3 successful grant applications, raising a total of \$4,900 from The Green Initiative Fund at UC San Diego (grants reviewed by student board).

POLITICAL EXPERIENCE

Commissioner October 2014 - present

City of Berkeley Community Environmental Advisory Commission

Berkeley, CA

• Developing policy recommendations for City Council to improve local air quality.

District Office Intern

April 2013 – June 2013

U.S. House of Representatives, District Office of Congressman Scott Peters San Diego, CA

• Acted as first point of contact for constituents, and represented the district office through letters and emails.

TECHNICAL SKILLS

Web development: JavaScript (including jQuery, Node, Express, d3), HTML, CSS, Python

CAD and modeling: Excel, COMSOL, AutoCAD, SolidWorks

Hardware: Arduino