# Jack Cian Boland

Portfolio: bolandcommajack.com

### Objective

To obtain a full-time position involving either mechanical engineering and/or product design.

#### Education

#### Stanford University

M.S. Design Impact, June 2022

#### University of Wisconsin-Madison

B.S. Mechanical Engineering, May 2013

Certificate in Integrated Studies in Science, Engineering, and Society with a focus in design

## Work Experience and Research

#### Product Realization Lab - Stanford University, Stanford, CA // Course Assistant // Sept. 2019 - Current

 Mentoring and teaching of cross-disciplinary students on the design and manufacturing process ranging from conceptualization to prototyping and fabrication involving various manufacturing techniques.

#### Delve San Francisco, CA

Mechanical Engineer // Sept 2013 - Aug 2019

- Drove development of new products from early brainstorming and concept generation to prototyping and technical execution through DFM and manufacturing handoff.
- Engaged directly with clients to best understand their needs and properly incorporate their expertise in the development process.
- Worked closely a diverse team of design researchers, industrial designers and engineers to balance technical requirements with aesthetic and usability objective to produce a more successful product for our clients.
- Developed complex CAD databases employing robust Master Modelling techniques for driving complex assemblies

Prototype Software Developer // Jan 2016 - Aug 2019

- Designed and implemented basic GUI's to display sensor data, perform real time analysis/computation and allow for users to interact with test setups dynamically.
- Perform live image processing to provide qualitative analysis of the performance of various test conditions in an experimental setup.

#### Otherlab San Francisco, California // Junior Engineer // June-Aug 2012

- Worked both independently, and in collaboration, on various engineering projects ranging from an electric hydrofoil to inflatable car prototypes for automotive company.
- Redesigned, tested and fabricated components for an electric hybrid cargo tricycle using CAD and a wide variety of prototyping tools, such as laser and water-jet cutters.

#### Frontier Fellow & Undergraduate Intern Wisconsin Institute for Discovery // Sept. 2012-Aug. 2013

- Independent research project focused on developing a mechatronic apparatus for physically rendering data streams and environment interaction, using computer controls, microcontrollers and CAD.
- Designing and creating devices for horticulture based projects in a new Art/Optimization collaboration lab.

## Honors, Awards and Competitions

- Frontier Fellow; Wisconsin Institute for Discovery; Spring 2013
- Global Steward's Sustainability Prize competition; Spring 2012; GRAND PRIZE (Awarded \$17,000)
- CleanTech Open 2012; SEMI-FINALIST
- Global Steward's Sustainability Prize; Spring 2013; FINALIST
- Dean's Honor List; Fall 2009 & Fall 2013

#### Leadership

#### Engineers Without Borders Financial Manager May 2011 - June 2013

• Managed and oversaw all of the financial transactions and records of the five different projects (Haiti, El Salvador, Kenya, Rwanda, and Domestic) within the Engineers Without Borders UW Madison Chapter.