Angelo Braganza

agbraganza@berkeley.edu | (831)647-8424 | www.linkedin.com/in/angelobraganza/
Portfolio: https://www.angelobraganza.com

EDUCATION

University of California - Berkeley **Berkeley, CA**
B.S. Mechanical Engineering *Expected Graduation: 2023*

- UC GPA: 3.60
- Relevant Coursework: Introduction to Manufacturing and Tolerancing (GD&T), Introduction to Solid Mechanics, Programming for Scientists and Engineers (MATLAB), 3-D Design (SolidWorks), Thermodynamics, Engineering Mechanics II, Fluid Dynamics, Design Methodology, Electronics for the Internet of Things*, Mechanical Behavior of Engineering Materials*

*planned

WORK EXPERIENCE

Sutardja Center of Entrepreneurship and Technology **Berkeley, CA**
Research Apprentice *Sept. 2020 - Present*

- 3D modeling and fabricating prototype casing assemblies for a handheld COVID-19 tester; generated and interpreted 2D CAD files to properly visualize the assembly and assist with the manufacturing process.
- Researching the application of microfluidics on printed circuit boards (PCBs); designing an SD card assembly that can accurately collect and test a saliva sample for COVID-19 using carbon nanotubes.
- Worked alongside Dr. Waqas Khalid and an interdisciplinary team of student researchers; Communicated with suppliers and manufacturers to coordinate material and part selection and purchasing.

UC Berkeley Solar Vehicle Team (CalSol) **Berkeley, CA**
Mechanical Subteam Engineer *2019 - Present*

- Researching and designing a non-linear steering column assembly for our tenth generation solar vehicle.
- Drafting detailed Bills of Materials (BOMs) through researching and communicating with manufacturers and outside vendors of pre-made components and raw materials.
- Prepared and presented organized deliverables that presented the summation of research and design, justifying qualitative and quantitative aspects of the design, as well as material selection and cost-benefit analysis to a team of 50+ members.

Design Project

High Impact Sports: Modular Foam Roller **Berkeley, CA**
Awards: Best Overall at Jacobs Institute Spring 2021 Showcase *January 2021 - May 2021*

- Conducted extensive and detailed market and user research interviews on high school and college-aged rugby players to formulate a prototype for an at-home replacement for physical therapy.
- Generated 50+ concepts and applied various human-centered design principles (persona mapping, pugh charts, VOA charts) to determine a final concept and prototype;
- 3D modeled the final prototype assembly using Solidworks before printing and assembling the final prototype.
- Collaborated with a diverse team of designers and regularly led discussion and idea pitches from a design and engineering perspective.

SKILLS & INTERESTS

Technical Skills: 2D and 3D CAD Software (AutoCAD, SolidWorks, Fusion360), MATLAB programming, Finite Element Analysis (FEA), Geometric Dimensioning and Tolerancing (GD&T), Microsoft Office (Excel, Word, Powerpoint), Google Drive, Adobe Suite (Lightroom, Illustrator), Canva.

Experience With: Metrology, User Research Techniques, Rapid Prototyping, 3D Printing Methods, Project Management, Scientific and Design Methods concepts.

Professional Interests: Product and UX Design, Research and Development, Human-Centered Design, Consumer Electronics.