Angelo Braganza

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Portfolio: https://www.angelobraganza.com

EDUCATION

University of California, Berkeley **Berkeley, CA**
B.S. Mechanical Engineering, Data Science Minor *Expected Graduation: May 2023*

- GPA: 3.45
- Relevant Coursework: Introduction to Manufacturing and Tolerancing, Engineering Mechanics II, Fluid Dynamics, Mechanical Behavior of Engineering Materials, Electronics for the Internet of Things, Dynamic Systems and Feedback, Foundations of Data Science, Heat Transfer, Industrial Design, Surface Modeling and Rendering

*in progress

WORK EXPERIENCE

Imperative Care Inc. **Campbell, CA**
Manufacturing Engineering Intern *June 2022 - Aug. 2022*

- Designed and carried out an engineering study to investigate discrepancies in indirect material usage on the production line. Determined new usage estimates that were 51% more accurate than previously found.
- Drafted and redlined Work Instructions and Manufacturing Process Documents for all product lines to enforce consistent usage and reduce production time. Deployed Document Change Orders to address errors and mitigate potential auditing concerns.

Nanotechnology Lab - UC Berkeley **Berkeley, CA**
Research Assistant *Sept. 2020 - Jan. 2022*

- 3D modeled PCB casing holder assemblies for a handheld COVID-19 tester; generated and interpreted 2D CAD files to properly visualize and design corresponding components in Solidworks with careful consideration of tolerances and joinery methods.
- Fabricating various mechanical components through laser etching, 3D printing, and rapid prototyping techniques and equipment. Communicated with suppliers and manufacturers for outsourced and off-the-shelf components.

Frontier Bio Corporation **Oakland, CA**
Mechanical Engineering Intern *Oct. 2021 - Dec. 2021*

- Designed, assembled, and debugged complex PCBs and other electromechanical components, through the use of various soldering, machining, and manufacturing techniques and equipment to aid in the development of bioprinted tissues and organs.
- Improved production and assembly line of 3D bioprinters by streamlining component production processes. Utilized in-house fabrication equipment to produce and replace parts.

PERSONAL PROJECTS

Self Watering Plant System **Berkeley, CA**
Aug. 2021 - Dec. 2021

- Designed, modeled, and debugged an automatic plant watering system controlled by a ESP32 microcontroller.
- Wrote Python code to interpret sensor data and automatically trigger a water pump based on predetermined water levels; implemented Internet of Things (IoT) features to graph water levels and send users a phone notification when plant was watered.

For more project samples I encourage you to visit my online website portfolio, listed above.

SKILLS & INTERESTS

Technical Skills: 2D and 3D CAD Software (AutoCAD, SolidWorks, Fusion360), Programming (MATLAB, Simulink, Python), Finite Element Analysis, Geometric Dimensioning and Tolerancing (GD&T), Microsoft Office (Excel, Word, Powerpoint), Google Drive.

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