Tyler Lestak

6285 Via Regla, San Diego, CA, 92122 • (805) 338- 4266 • tklestak@yahoo.com • linkedin.com/in/tyler-lestak/

Summary

A driven mechanical engineering student with extensive laboratory experience. Skilled in design and prototyping of products ranging from electronic systems to mechanical devices. Goal oriented with success within a team or through individual work.

Skills / Qualifications

- Design and prototyping in mechanical and electrical applications
- Experience with SolidWorks, Python, LabVIEW, CircuitMaker, ANSYS, MATLAB, Arduino, and Microsoft Office
- Detail oriented and innovative with strong skills in data analysis and presentation of results

Experience

Interface Design Laboratory, SDSU   **May 2019 – Present**
Graduate Researcher
- Further developing Cold Spray System to allow for precise and efficient spray coating of electrodes
- Increased system efficiency and streamlined user controls through extensive LabVIEW scripting
- Successfully implement Arduino Microcontroller and LabVIEW DAQs to concurrently to manage various system sensors, actuators, and parameters
- Build and program 3-axis stage to use in the coating of multiple electrodes in a single run
- Reduce manufacturing costs through use of in-house parts and services while executing necessary part orders based on appropriate pricing and use within the system

Ni Group, UCSD   **October 2017 – June 2018**
Undergraduate Researcher
- Assisting in the search for Dark Matter using a liquid xenon detector
- Obtain picoFarad level accuracy through design and manufacture of Arduino powered capacitance meter
- Execute experiments and analyze data of liquid level measurements of Xenon tank to millimeter accuracy
- Create and maintain a Python based data base as well as a live data feed through Google FireBase
- Periodically present findings to lab colleagues to reports results and gain insight on potential issues

PDM Solutions   **July 2017 – September 2017**
Manufacturing Engineer Intern
- Execute various roles within company to assist with both manufacturing and product development
- Troubleshoot defective devices, work to quickly repair issues, and run final tests for quality before returning to customer
- Successfully prototype and develop a Raspberry Pi based controls box
- Work with others to efficiently manufacture large quantities of products while keeping with high company standards
- Update company records through accurate warehouse inventory

Education

San Diego State University   **August 2018 – May 2020**
M.S., Mechanical Engineering

University of California, San Diego   **September 2014 – June 2018**
B.S., Physics with a Specialization in Astrophysics
Minor, Engineering Mechanics

UC Education Abroad Program, University of Edinburgh   **September 2016 – December 2016**
Physics

Relevant Courses: Solid Mechanics, Engineering Graphics and Design, Mechanics of Materials, Statics, Finite Element Analysis, Vibrations, Fluid Mechanics, Thermodynamics, Relativity and Quantum Mechanics Labs in Circuits and Electronics; Engineering Design; Waves, Fluids, & Optics; Observational Astrophysics

Honors / Activities

- Edinburgh University Young Scientific Researchers Association, Member, 2016
- Provost's Honors (Dean's List), UCSD, Fall 2014, Spring 2016
- Captain, UCSD Men's Lacrosse Team, 2017, 2018