Jonathan (Joann-Matthew) Means

(They/Them)

Cell: +1(408)660-6444 School Email: jmmeans@uci.edu

LinkedIn: https://linkedin.com/in/meanstoachieve

Education

University of California, Irvine

Major: Materials Science and Engineering

GPA: 3.180

Grad: Spring 2024

Lab Experience

- Performed tensile and compression tests with an Instron machine
- Skilled in micro-pipetting, and loading gel plates for electrophoresis
- Analyzed Raman spectra, X-ray diffraction patterns, SEM images, and TEM images.
- Studied failure and deformation mechanisms in several material classes
- Learned about material processing methods including polymer electrospinning, bio-inspired synthesis of magnetite, sol-gel ceramic synthesis, and powder sintering.
- Designed and built a quadcopter with a small team in 10 weeks using provided motors and flight control components.

Computer Programming & Image Processing Skills

- Intermediate level MATLAB programmer
- Knowledge of Python and JavaScript from hobby projects, posted online at jmeansta.github.io
- Proficient in image editing with Photoshop and GIMP
- Experience using ImageJ in preparing figures for lab reports

Extracurriculars

QT-STEM (Sep 2021 - now)

- Stepped up to the role of undergraduate lead for the 2021-22 school year.
- Organized social events and academic discussions including a panel of LGBTQ+ people in industry for queer and trans students in STEM Fields.

School highlights

Electrical and optical properties of materials (Apr - Jun 2021)

- Understood how a material's energy landscape translates to macroscopic properties like transparency and conductivity
- Examined PN junctions and how semiconductor properties can be manipulated to create simple transistors

Bio-Inspired materials (Apr - Jun 2022)

- Studied the application of biological processes and structures to engineering design challenges

Research (Jun 2022 - now)

- Examined TEM images to gain insight into nanoparticle sintering dynamics in a $CaCO_3$ system for application to direct air capture technologies