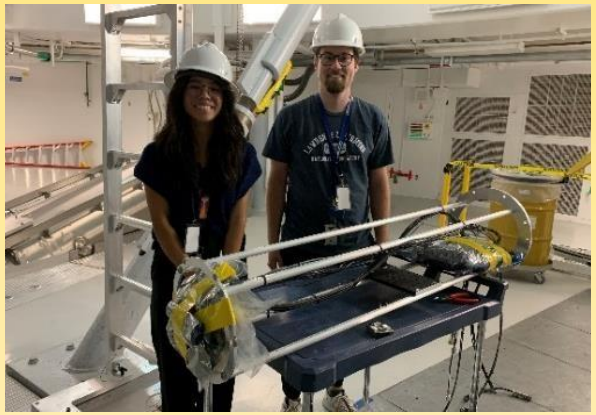
Ylicia Godinez

National Ignition Facility

Lawrence Livermore National Laboratory | In-Person Appointment

Overview

The National Ignition Facility contributes to the National Nuclear Security Administration's Stockpile Stewardship Program. In the National Ignition Facilities Office of Target Area Science and Engineering, the hCMOS team's goal is to support the effort of hCMOS x-ray Cameras which can capture 2D images of the shots in the National Ignition Facility.



Ylicia and fellow intern Tyler Bolleter preparing their prototypes for a shot at the National Ignition Facility Target Bay.

"Participating at Lawrence Livermore National Laboratory I was able to receive unparalleled knowledge, hands-on experience, and opportunities unlike anywhere else."

Outcomes

My project for this internship was to compare the effects of neutron radiation on different power supplies. The purpose was to find more options for the next hCMOS Camera design and characterize them for any degradation after a shot. With this project, I was able to research the field of radiation and specific electronics. I had the opportunity to create prototypes, characterize them, and put them in a real-world environment; a high-yield shot at the National Ignition Facility.

With the guidance of my mentors Anne Garafalo and Jack Dean, I was exposed to multiple areas of engineering. I gained hands-on understanding and experience of electrical engineering, problems solving skills, and critical thinking. I was delighted to network and share ideas with diverse engineers with multiple levels of experiences at the lab.

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Bachelor/Master of Science, Computer Engineering, California State University, Fullerton