

### College of Engineering



## The Team



**Alyssandra Steier** Team Lead



Nicholas Gabrielson Analysis & Design



Milos Skrbic Design & Manufacturing



**Jesus Flores** Research & Procurement

## Meet the Sponsor

Dr. Asfaw Beyene received his Ph.D. in Aeronautics and Power Engineering from Warsaw University of Technology. He joined the faculty of SDSU in 1989. His research focuses on energy systems: renewables, efficient power sources with emphasis on combined heat and power applications, cycle and energy analyses, mathematical modeling, and simulation.

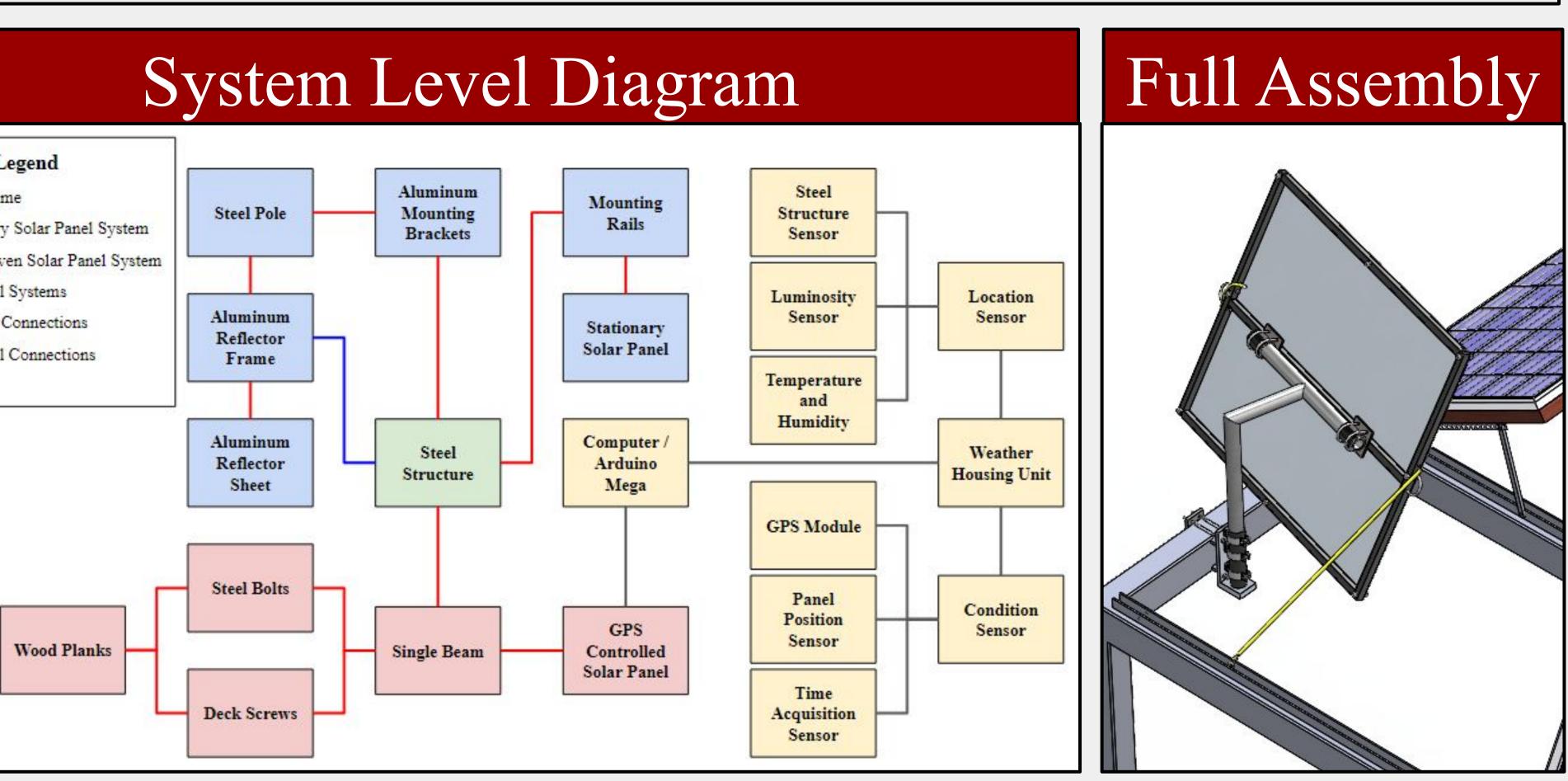
## Acknowledgements

Our team would like to thank Dr. Asfaw Beyene for sponsoring this project as well as Dr. Scott Shaffar for advising. We would also like to thank Michael Lester for aiding in the manufacturing process and Greg Morris for aiding with the assembly.

**Objective:** Within this project, we will design and test a fixed solar panel with a reflective mirror system to make solar energy capture less dependent on angles and space availability between the peak hours of 1400 -1800. The results of this system will be compared to the GPS-driven system currently installed on the EIS roof, which was built from previous senior design teams.

**Deliverables:** The key deliverables of this project include Solidworks models, analysis data, comparative results, test data, the final report, and presentation files.

	Legend
	Steel Frame
	Stationary Solar
	GPS Driven Sola
	Electrical System
_	- Fastener Connec
	— Electrical Conne
	- Rope



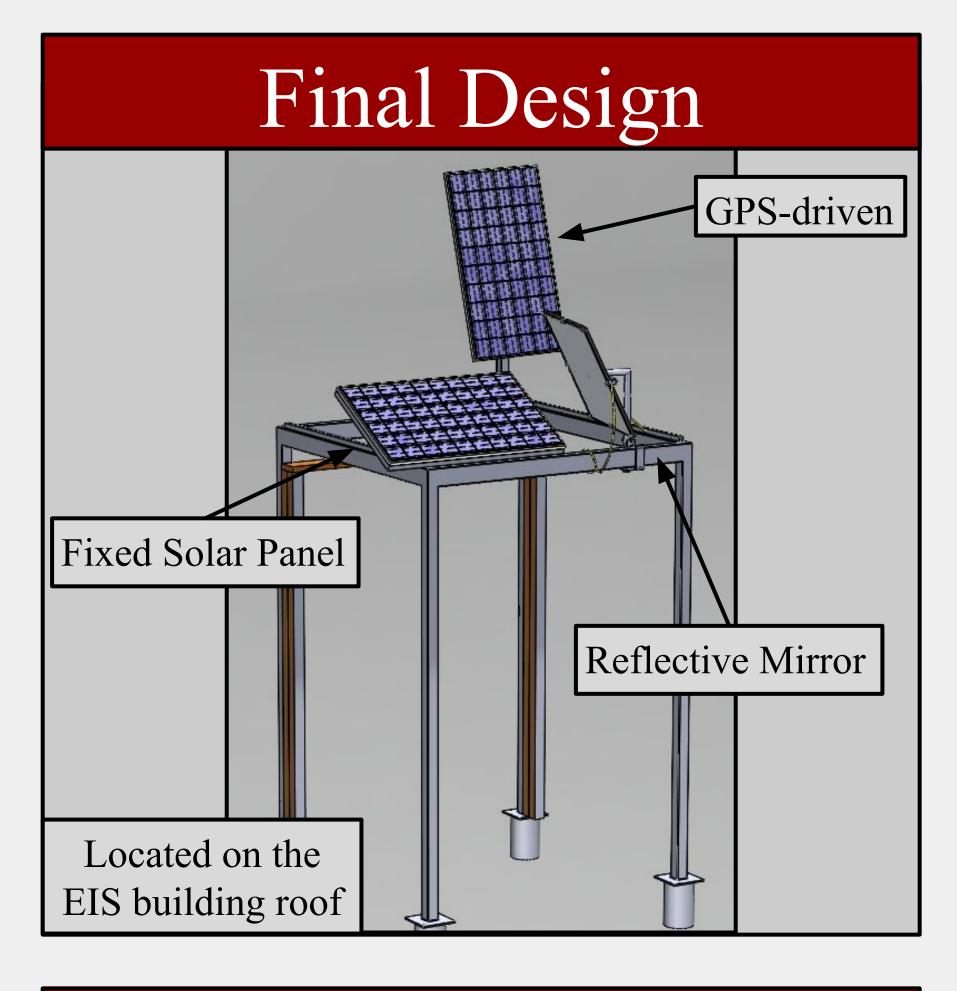


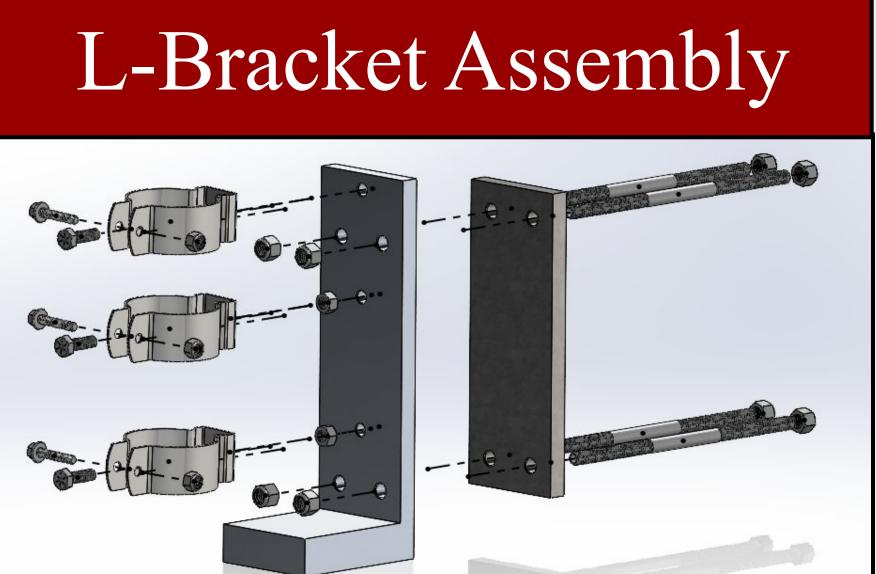
# Sun Tracking Reflectors with Comparison to **GPS-Driven Solar PV**

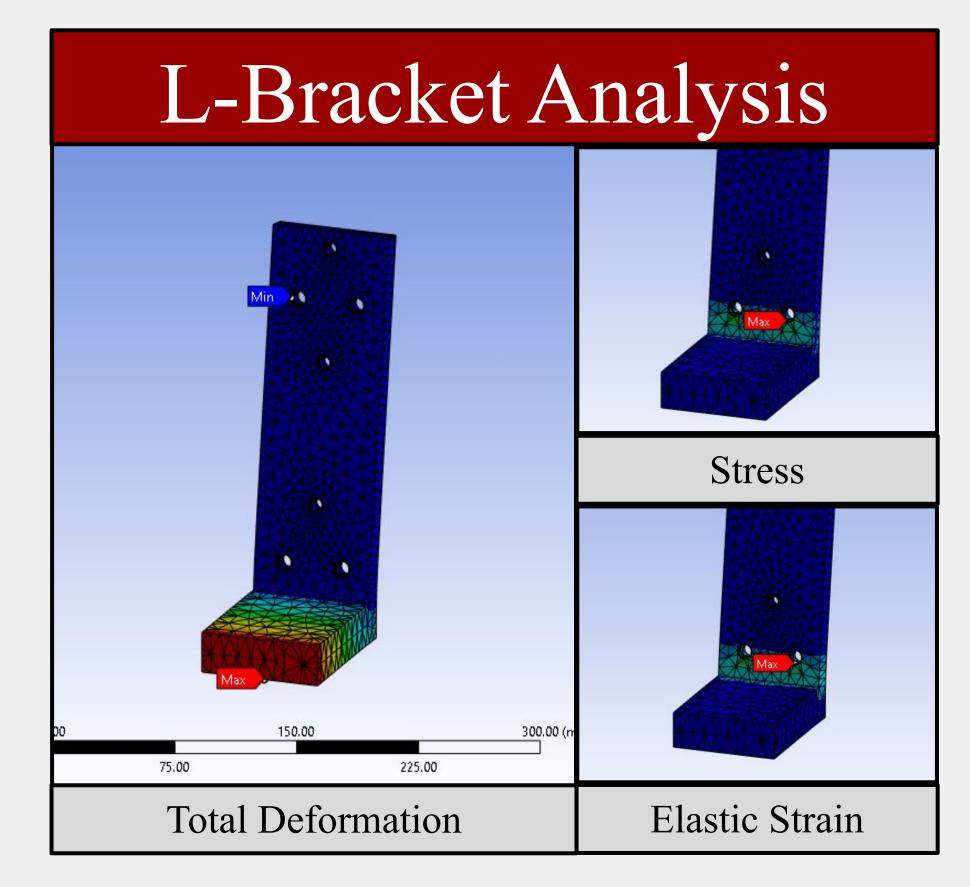
## Project Overview

## Manufacturing









#### Spring 2024