Solar Car

Paving the Road for Sustainable Transportation

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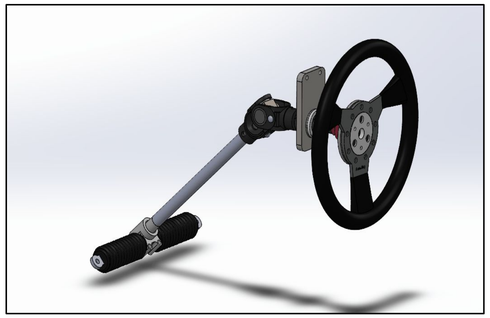
BACKGROUND

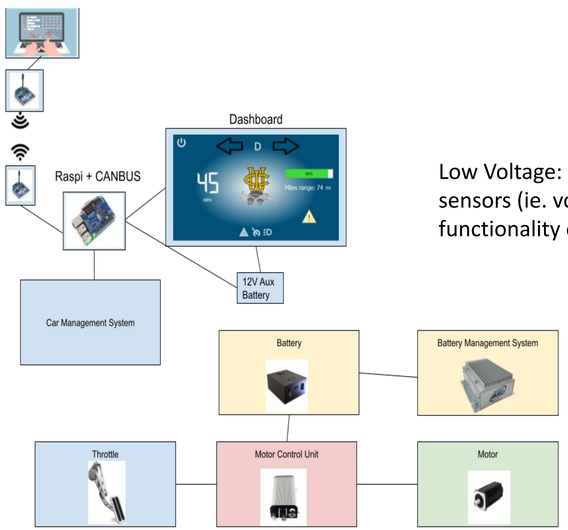
The SolEaters have a passion for renewable energy and the impact its use in place of fossil fuels would have on the Earth. The American Solar Challenge (ASC) is a 2000 mile endurance race across America that we aspire to compete in. However, this project is not competing in the challenge, but also making the leap to a cleaner future by engaging in the design and innovation of solar technology and becoming leaders in the renewable energy industry.



Human Interface: As we have assembled steering components, we have begun to integrate these with other subsystems

Suspension: By redesigning our driven and non-driven suspension, we have optimized our designs

ZotSun: UCI's First Solar Racecar

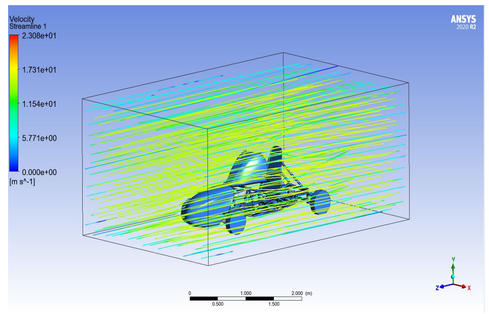


Low Voltage: Consists of the dashboard, microcontroller, and sensors (ie. voltage readers). This helps monitor the safety and functionality of the car.

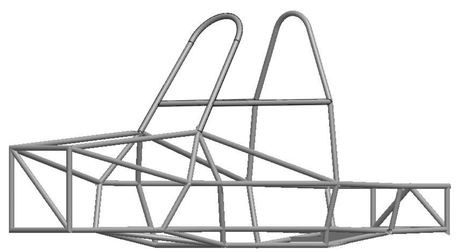
High Voltage: Consists of the motor, ESC, battery, and BMS. This is heart of the car that makes up the powertrain.

GOALS & OBJECTIVES

The SolEaters must design, construct, and raise funds for a fully powered solar racecar that surmounts the scrutineering process for FSGP in June of 2022. In our journey to competing in the Grand Prix, we hope to build a solid foundation for a solar racing team that will continue to engineer sustainable vehicles for many years to come.



Aerodynamics: By using ANSYS to run simulations on our nose cone, we were able to determine the drag coefficient



Chassis: With the addition of the new roll cage, our design now meets ASC regulations