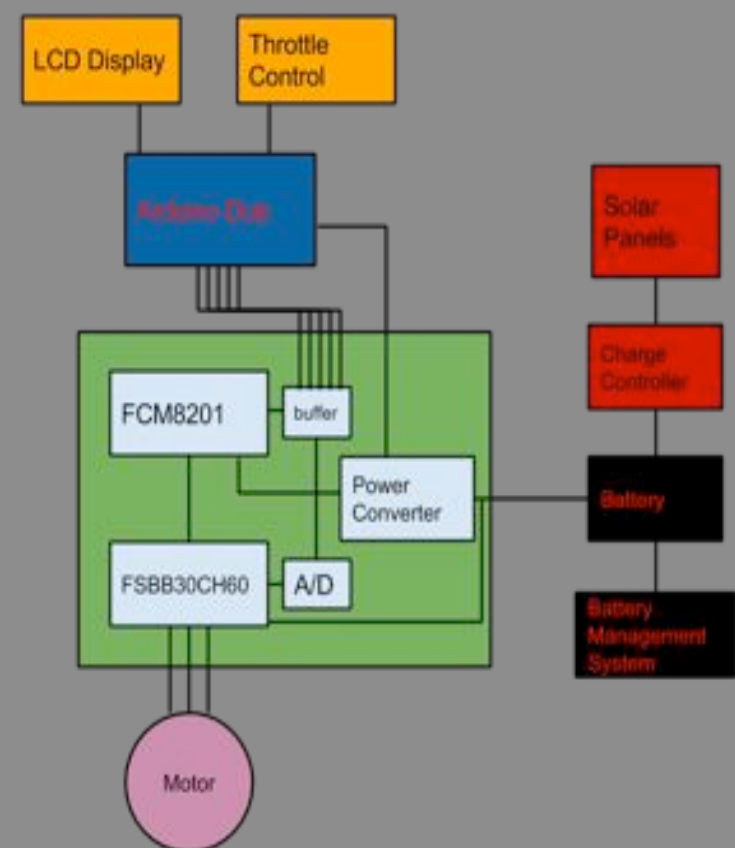
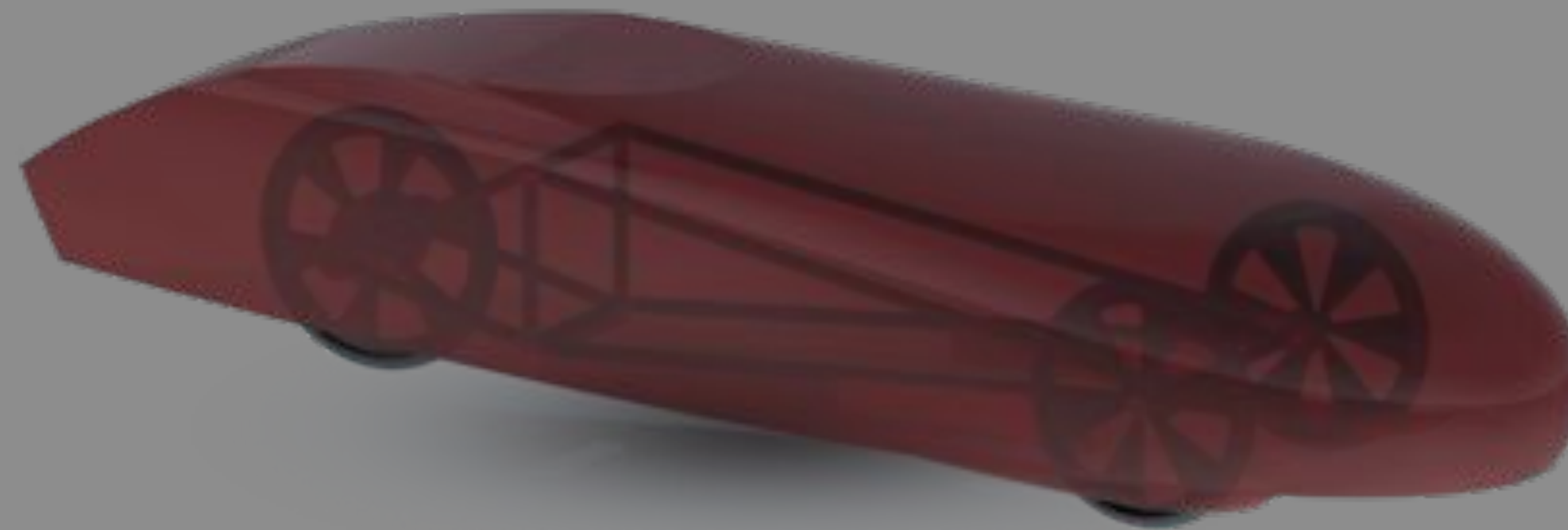


SEAS Racing

Johnathan Budd, David Calello, Jenny Chang, Ishan Chatterjee, James Conatser, Emma Dowd, Gregorio Gomez, Brett Henderson, Meghan McCarthy, Willie Pirc, Martin Reindl, Brian Shin, Khadi Tshishiku.
Advisor – Dr. Anas Chalah



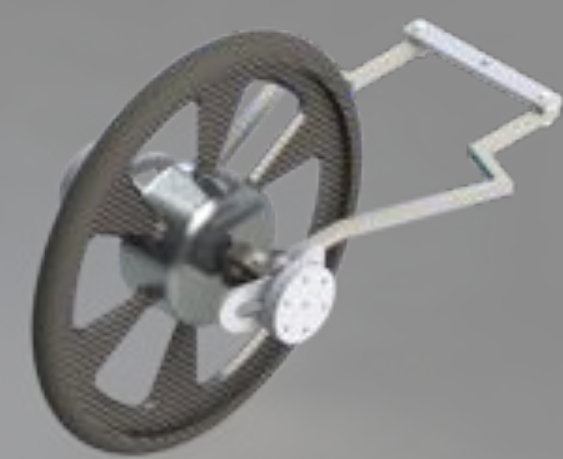
The brushless DC motor is controlled by a central MCU and powered by a combination of battery and solar power.



The SEAS Racing Team is designing a super efficient battery electric vehicle to compete in the Shell Eco marathon competition. In order to maximize efficiency we focused on optimizing for weight, aerodynamic drag, rolling resistance, and motor losses.



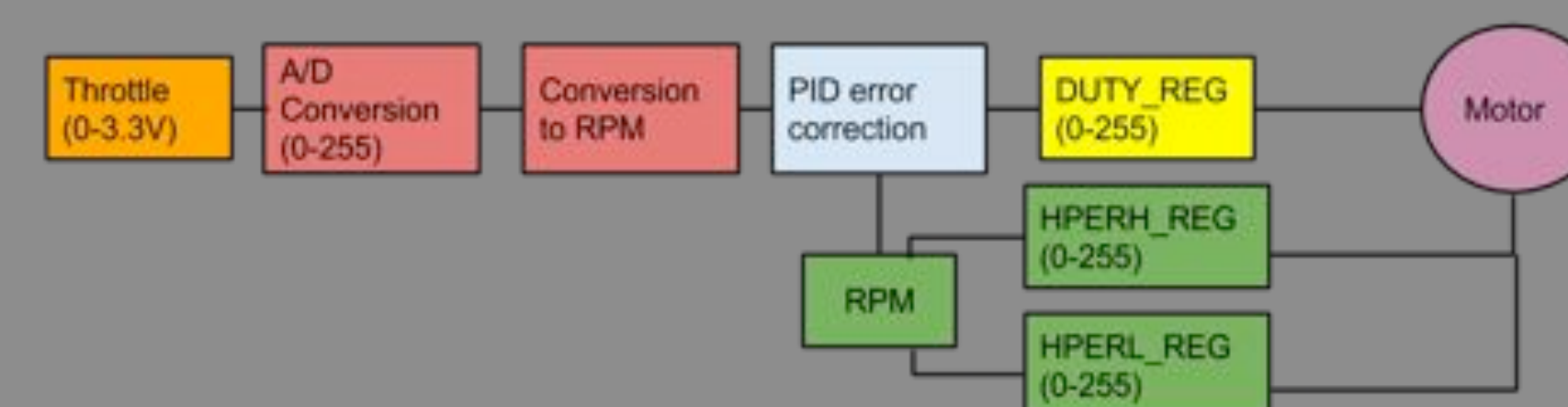
A carbon fiber and aluminum chassis provides the main support for the car. The modular design is both light and strong.



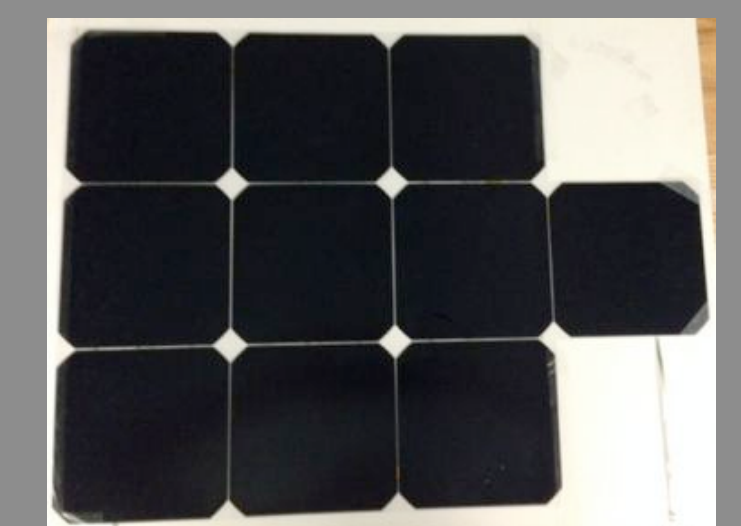
Rear wheel steering reduces the front cross sectional area of the car, improving aerodynamic performance.



The body of the car is designed to fit a series of airfoils to minimize drag. The body was fabricated from lightweight fiberglass using a custom mold.



In order to maximize efficiency a closed loop throttle control will be implemented. This will help reduce inefficiencies due to driver error and provide the opportunity for more advanced control in the future.



SunPower solar cells will be able to provide up to 20% of the total power of the car.