



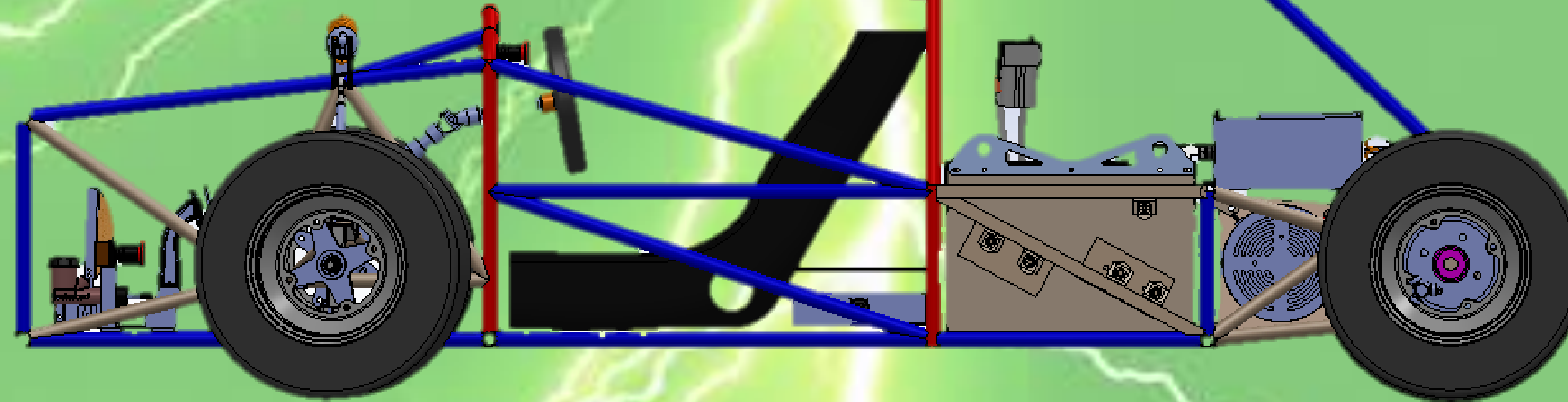
Anteater Racing FSAE Electric Thor



Goals

- Compete at FSAE Electric in June 21, 2017
- Pass technical inspection following all 1200 rules
- Compete in at least one dynamic event
- Complete running car 45 days before competition

Professor McCarthy
Chief Engineer: Zach DeMotte

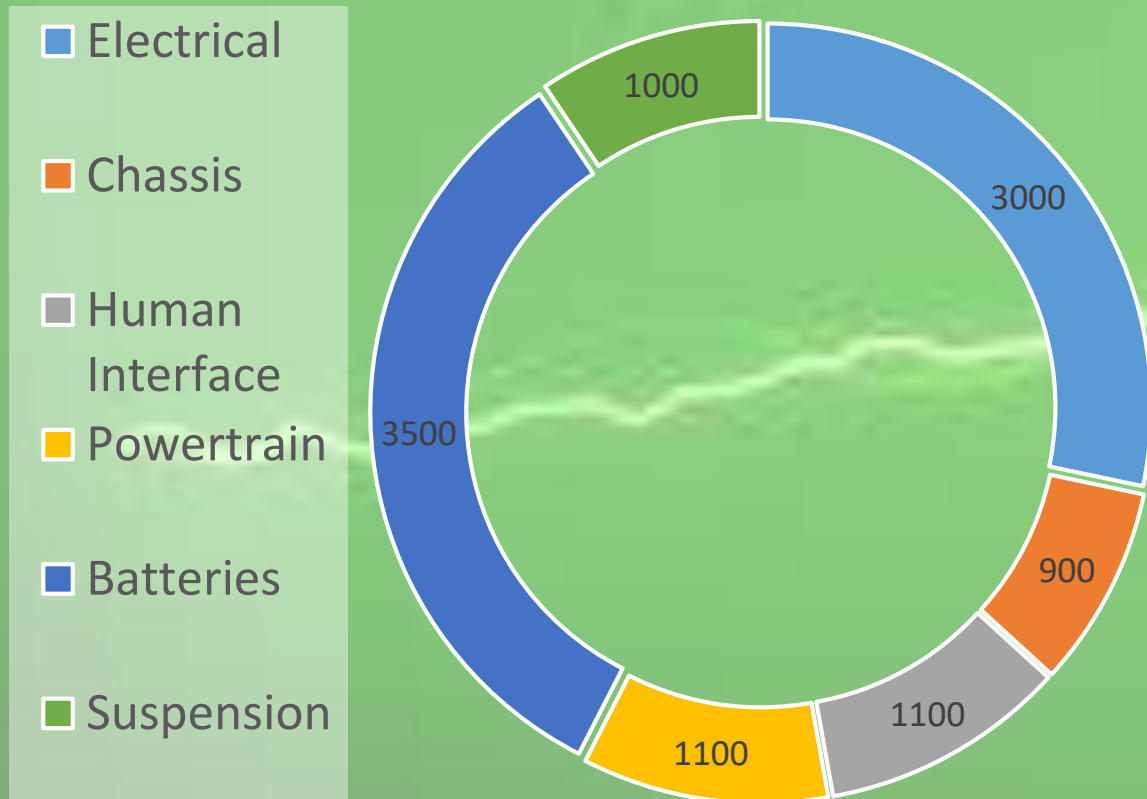


Powertrain

Antonio Rojas
Powertrain is the drive system of the car. The car will run two electric motors in parallel with 72 Volts and up to 1000 amps reaching a top speed of 50 mph in under 4 seconds.



Budget



Suspension

Liam Buchanan and Chris Chen
The suspension improves on the handling of the car while also protecting rigid components on the car from unexpected vibration. Our suspension must weigh less than 100 lbs and still support the remaining 700 lbs of the car

Human Interface

Sihao Xu and Junjie Huang
Human interface is every design and component that directly affects the driver. This includes steering system, brakes system, seat, and dashboard.



Batteries

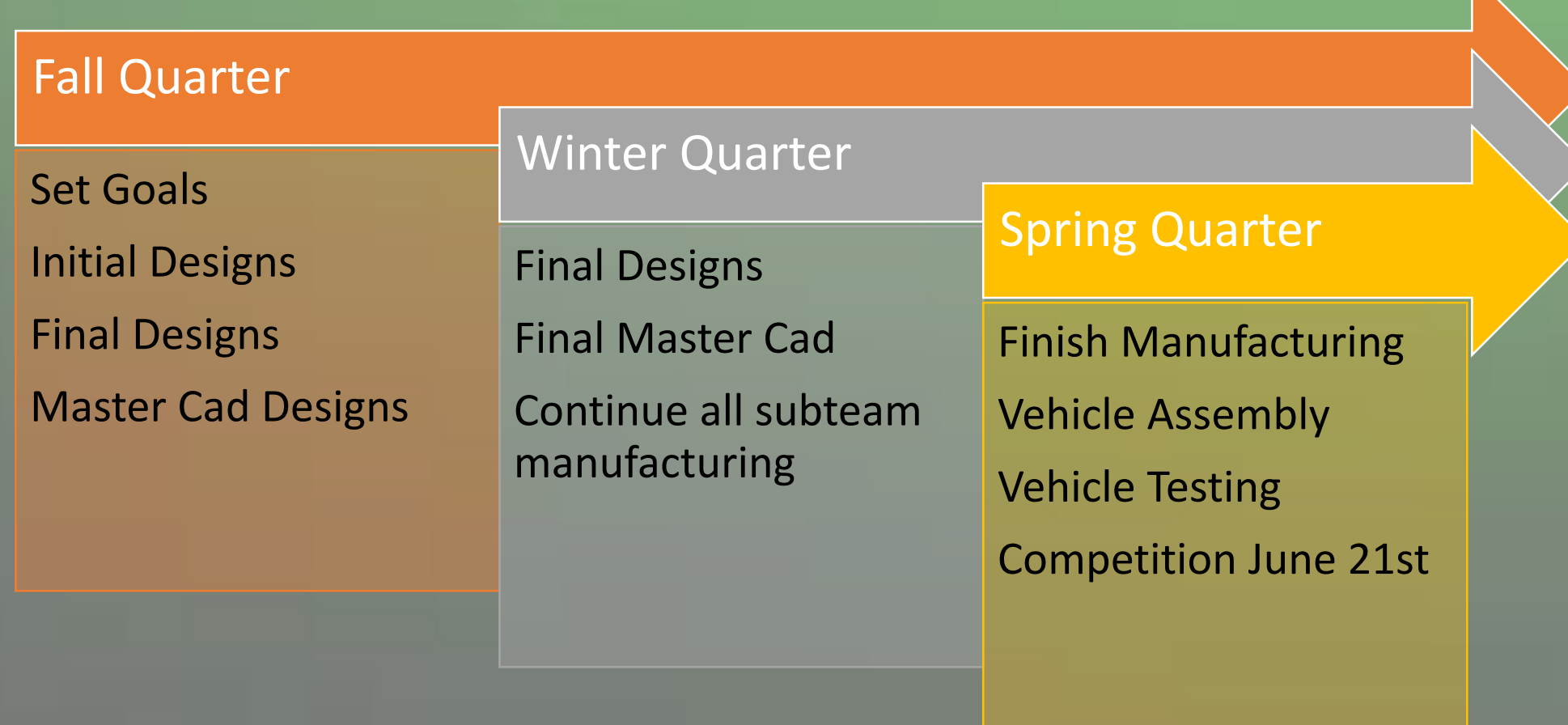
Mark McCorkle
The battery box is the heart of the car. The battery box holds 21 batteries equaling 72 volts. The box is designed to withstand 40g's of force and remain under 200 lbs with all components inside.



Electrical

Xavier Dedenbach
The electrical team covers all electrical on the car, though mainly focuses on the low voltage controls side of the car. The electrical team designs all shut down circuits, electronic throttle, and plausibility circuits. They then must integrate all circuits and integrate with mechanical systems on the car.

Timeline



Chassis/Body

Peter Bui
Chassis was designed during fall quarter and manufactured during winter quarter. The chassis was designed around the battery box and human interface which require the most space. This quarter, the chassis team moved on to designing and manufacturing the body for the car.