



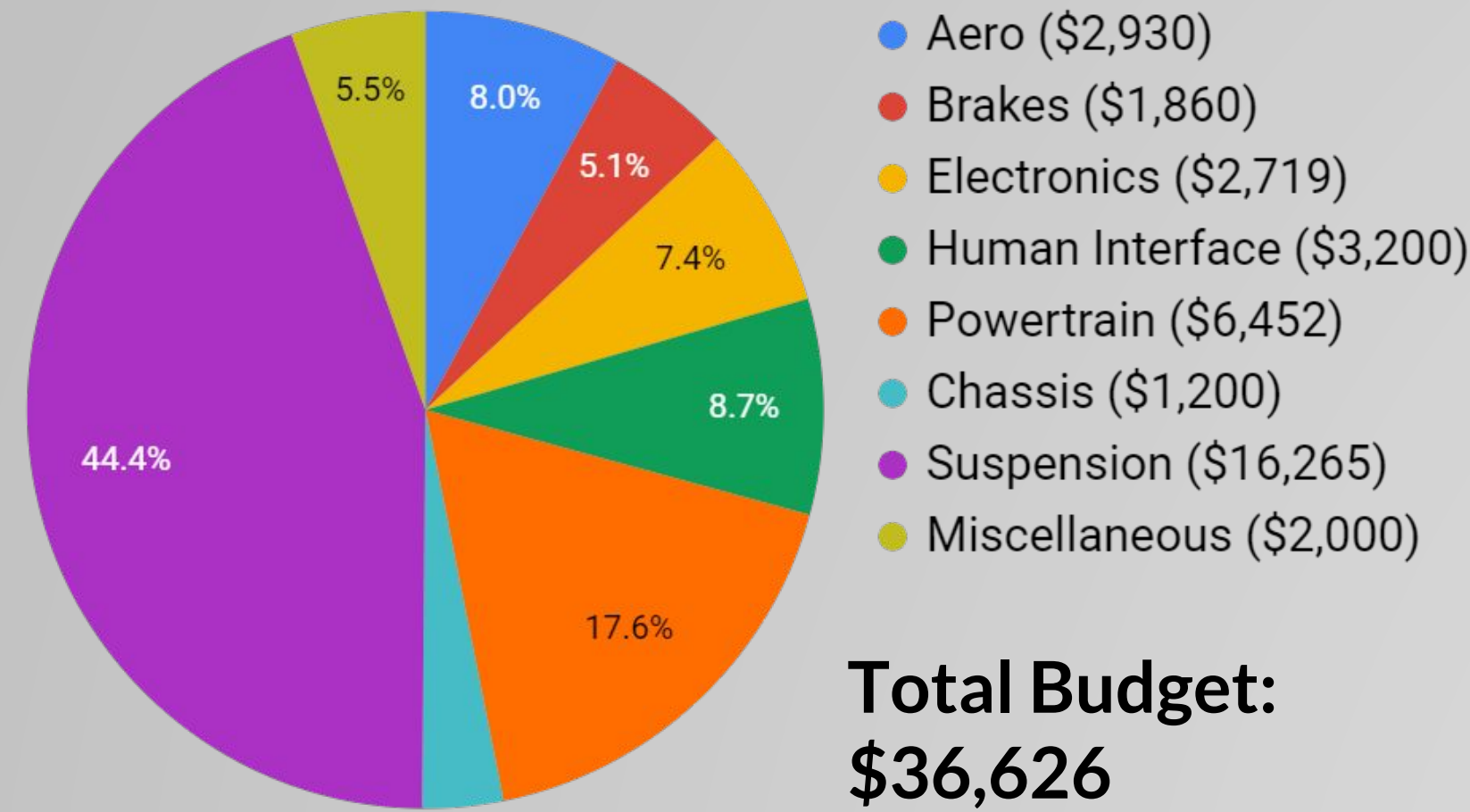
# Formula SAE



## Wraith

Instagram @anteaterracing

### BUDGET



### GOALS

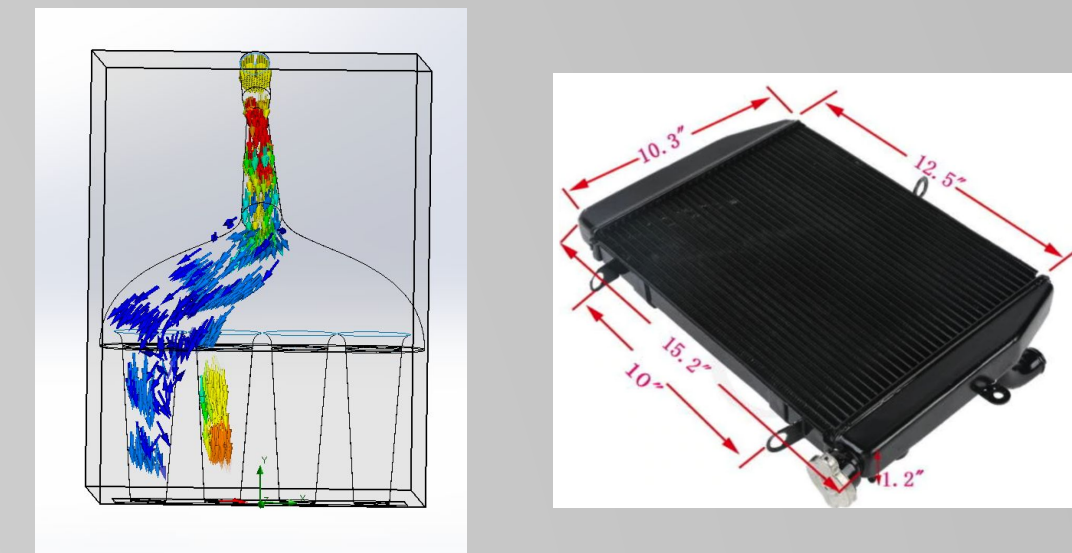
- Top 10 Finish at Lincoln FSAE-IC 2019
- Top 20 Design Presentation

### OBJECTIVES

- Weight reduction (480 → 420 lbs)
- Increase Acceleration (4.27 → 3.99s)
- Increase downforce (150 → 300 lbs)

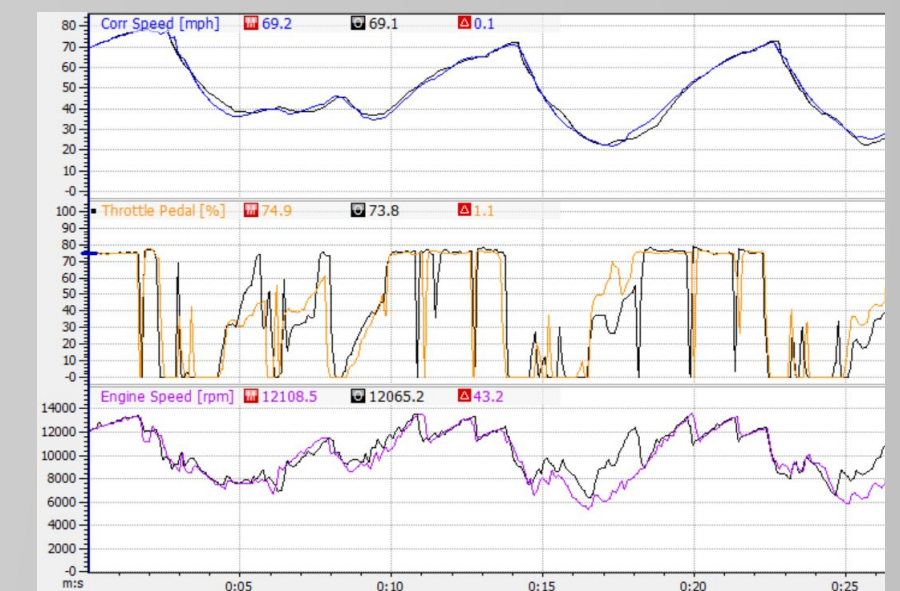
### POWERTRAIN

- Improved cooling
- Intake maximizes air flow to each cylinder
- Custom wet sump oiling to lower center of gravity



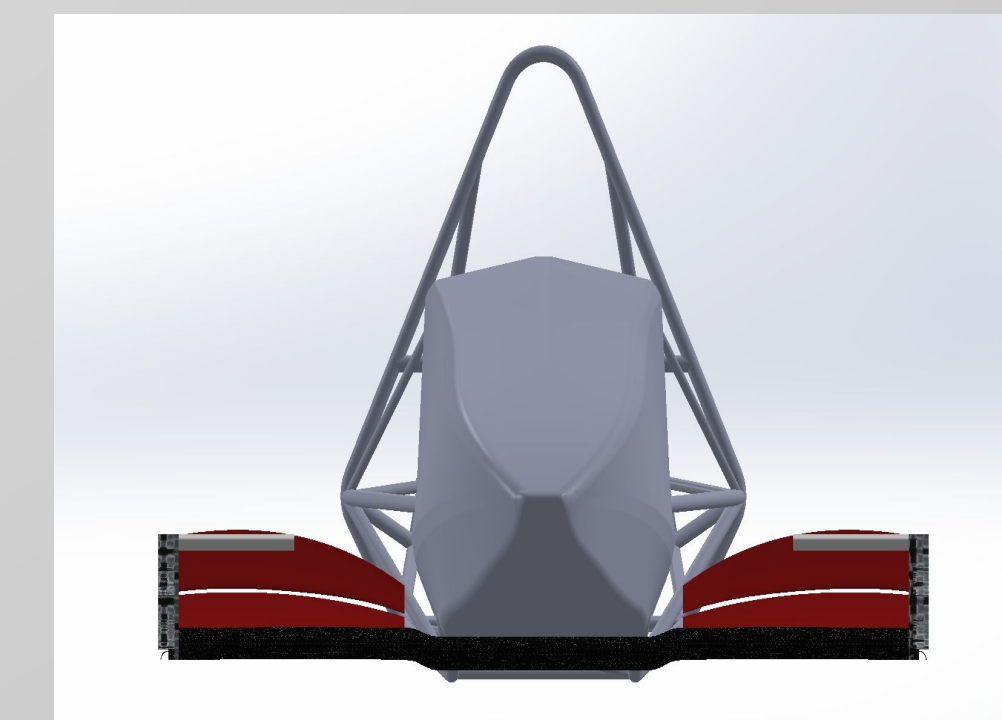
### ELECTRONICS

- Modular wiring harness
- Sensors for diagnostics, driver training, research and development



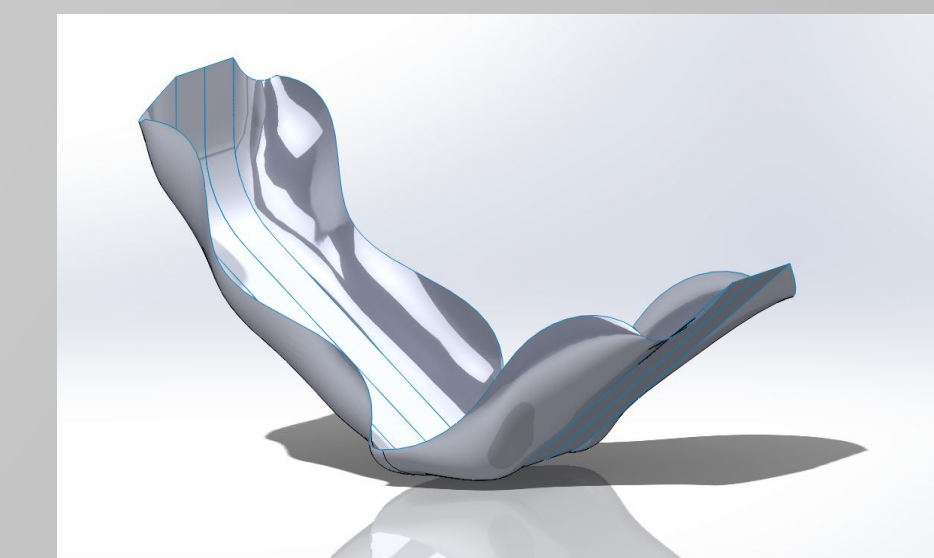
### AERO

- $C_l = 2.5$ ,
- $C_d = 1.2$
- Body design complete

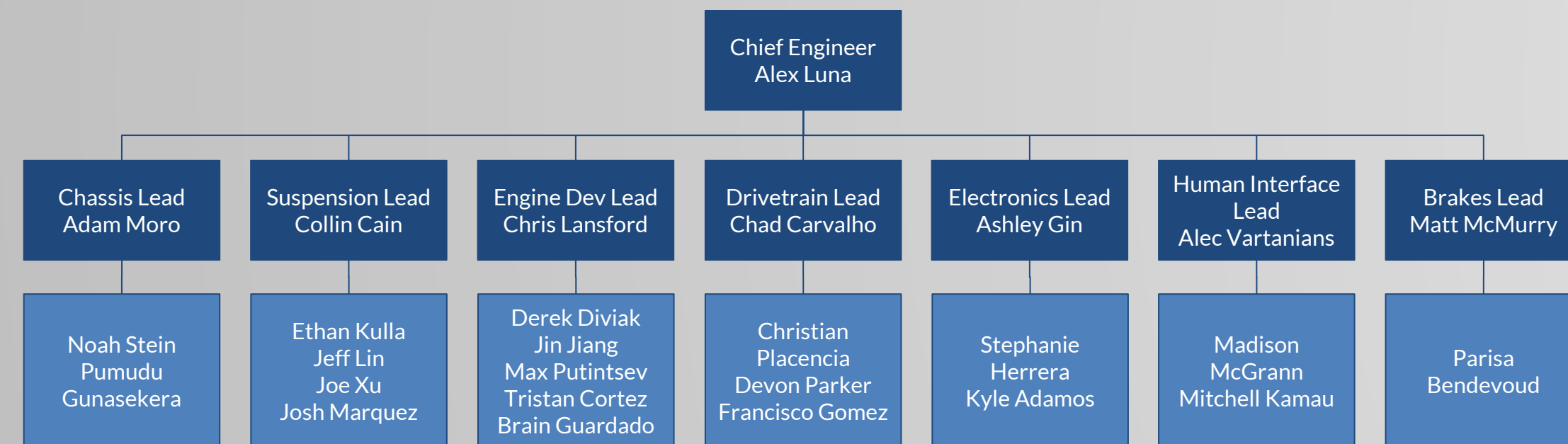


### ERGONOMICS

- Paddle shifters
- Improve driver comfort

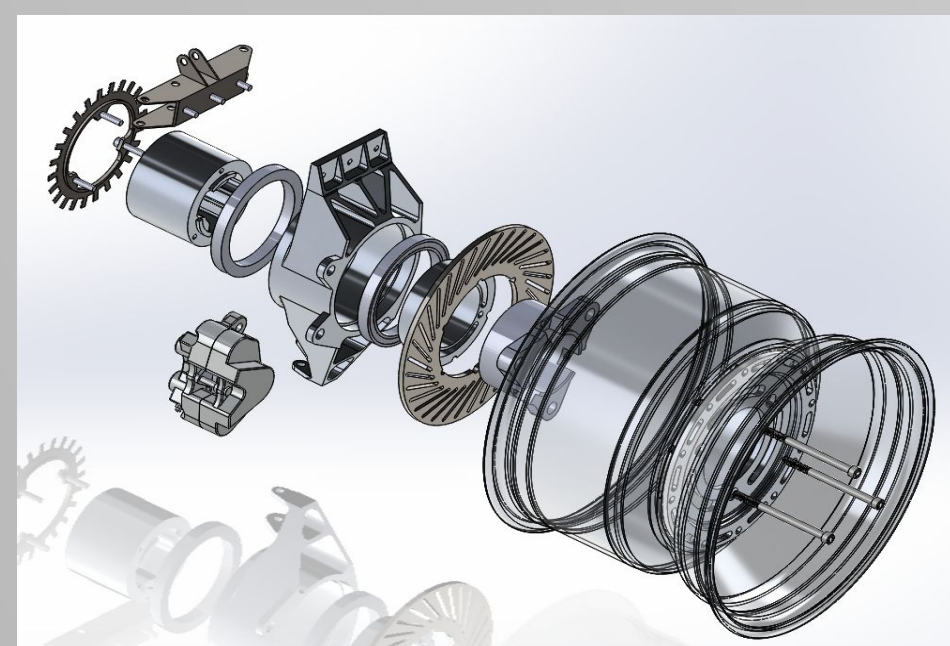


### TEAM ORGANIZATION



### SUSPENSION

- 15% weight reduction
- Removed rear suspension box



### CHASSIS

- 20 lb weight reduction
- 1800 ft\*lb/deg torsional rigidity

