

WashU Racing

Unveil 2019

Overview

1. Team and Timeline Breakdown
2. Vehicle System
3. Closing

Who We Are



Team Structure

Executive Leadership

President

Treasurer

Recruitment Lead

Vice President

Chief Engineer

System Leads

Powertrain/Drivetrain

Suspension

Aerodynamics &
Composites

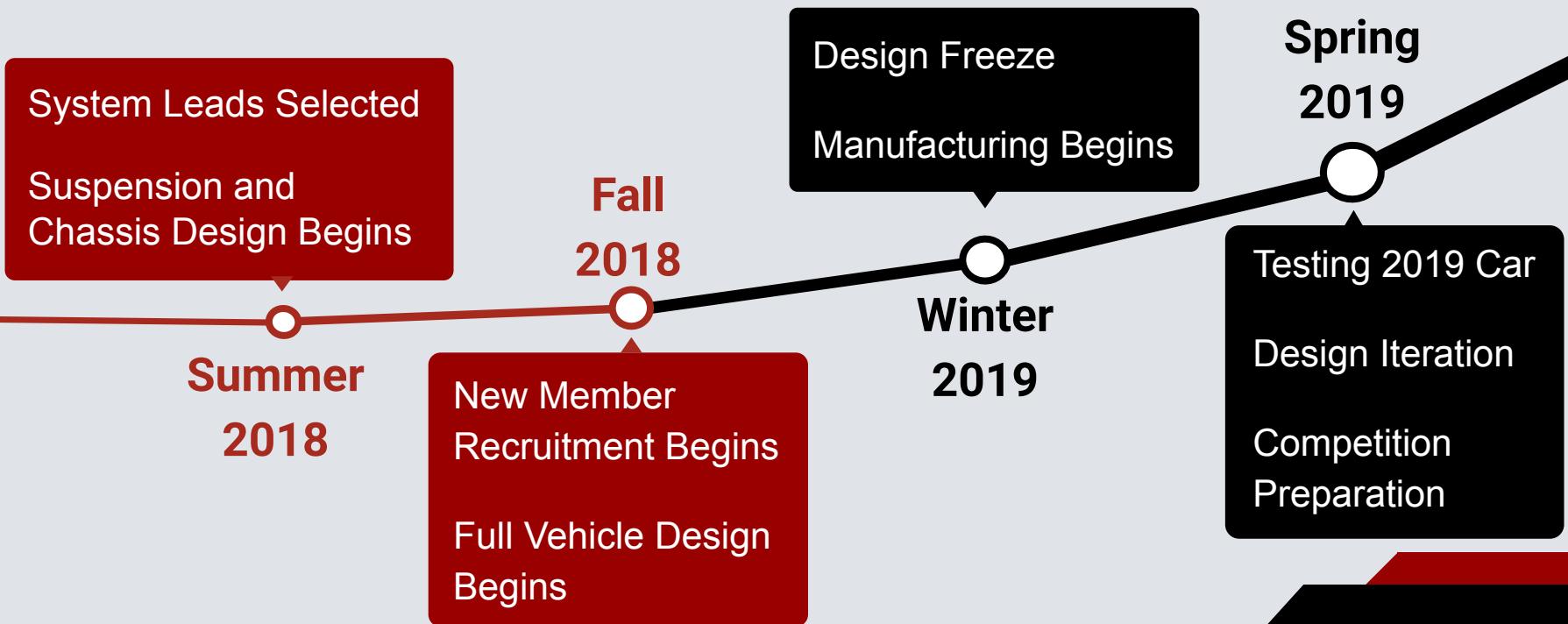
Ergonomics/Braking

Electronics

Data Acquisition

Manufacturing

Timeline



Competition at FSAE Michigan

- International Competition of 120 teams from around the world
- Static Events
 - ▷ Business Case
 - ▷ Cost Report
 - ▷ Design Report
- Dynamic Events
 - ▷ Skidpad
 - ▷ Acceleration
 - ▷ Autocross
 - ▷ Endurance

Team Goal: Drivability

- Adjustability
- Control
- Predictability

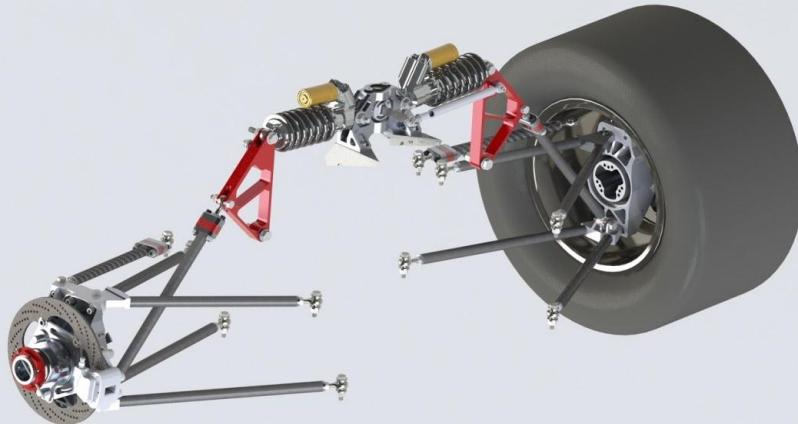
Team Platform

- To meet our new goal we overhauled every major system on the car

BFR → **WUFR**

SUSPENSION

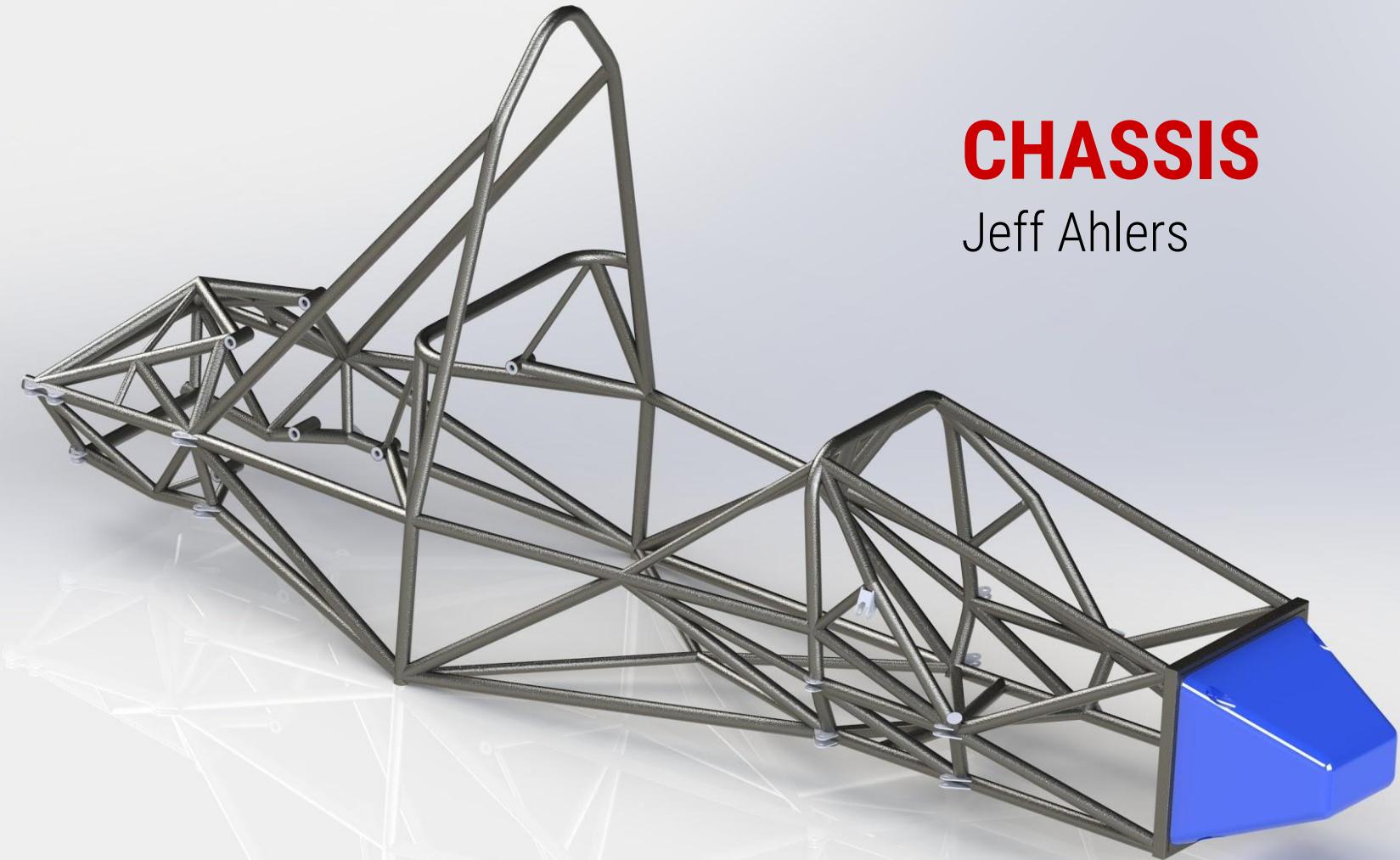
Alex Levy



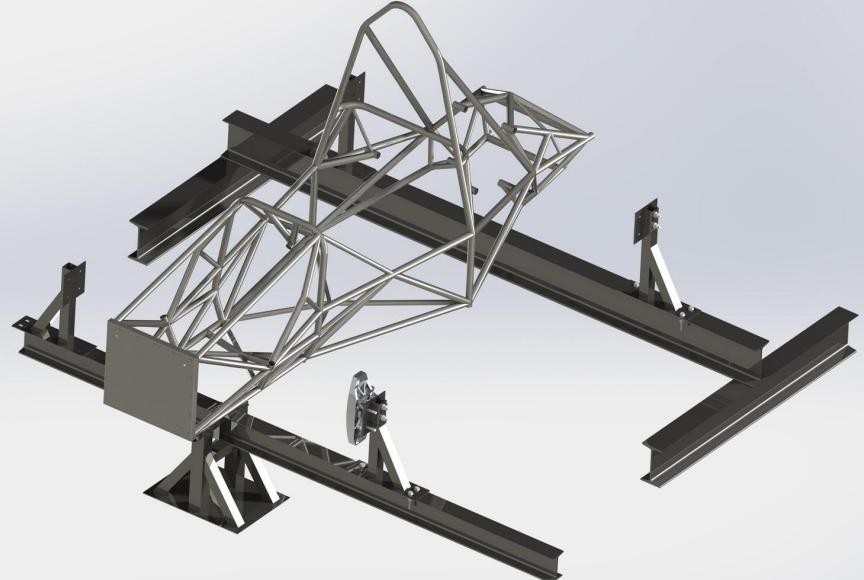
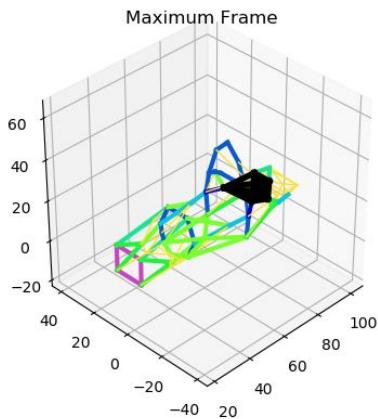
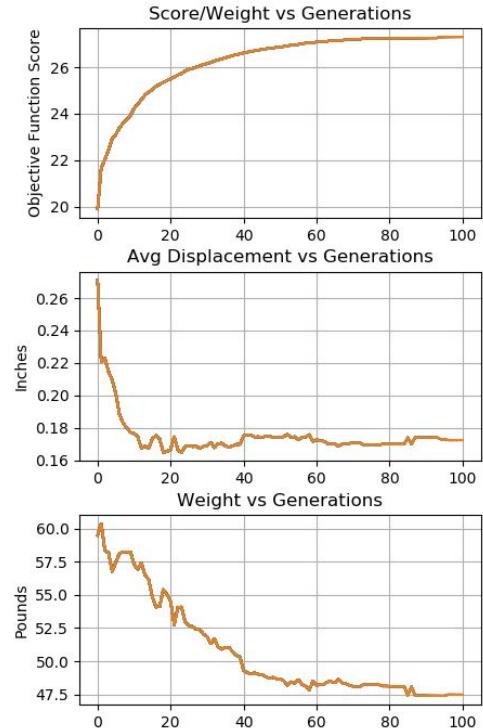


CHASSIS

Jeff Ahlers



Genetic Simulation - Geometry and Thickness



- 50,000+ frames per simulation
- 64% more torsionally stiff
- 2.3% lighter

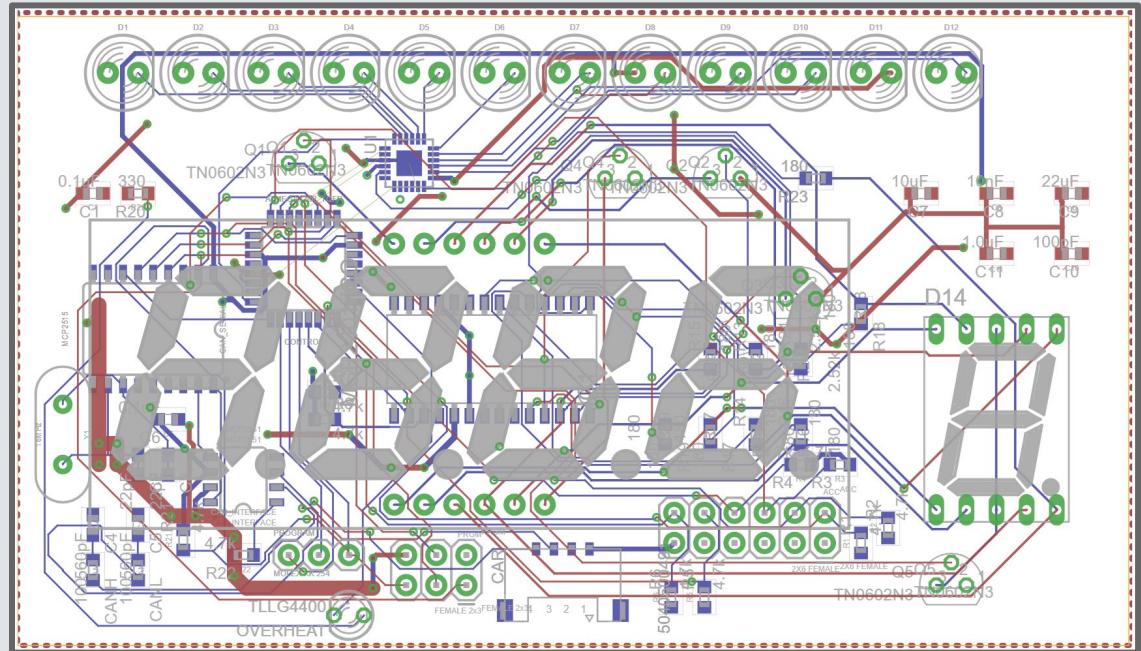
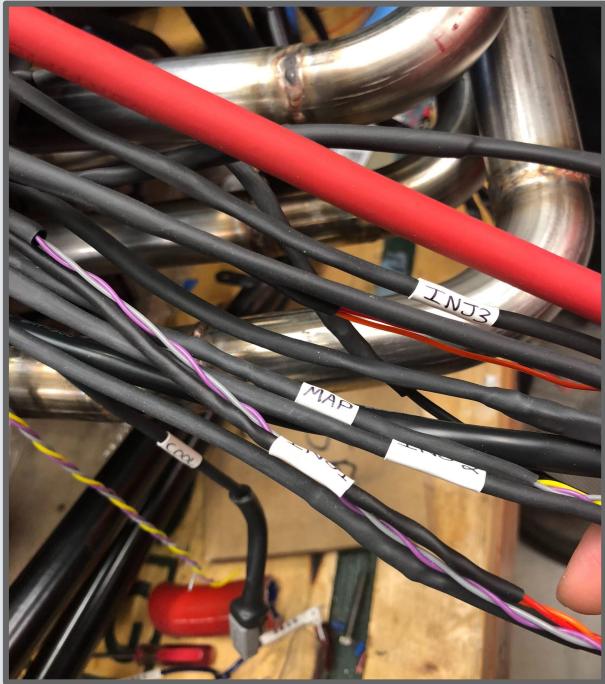


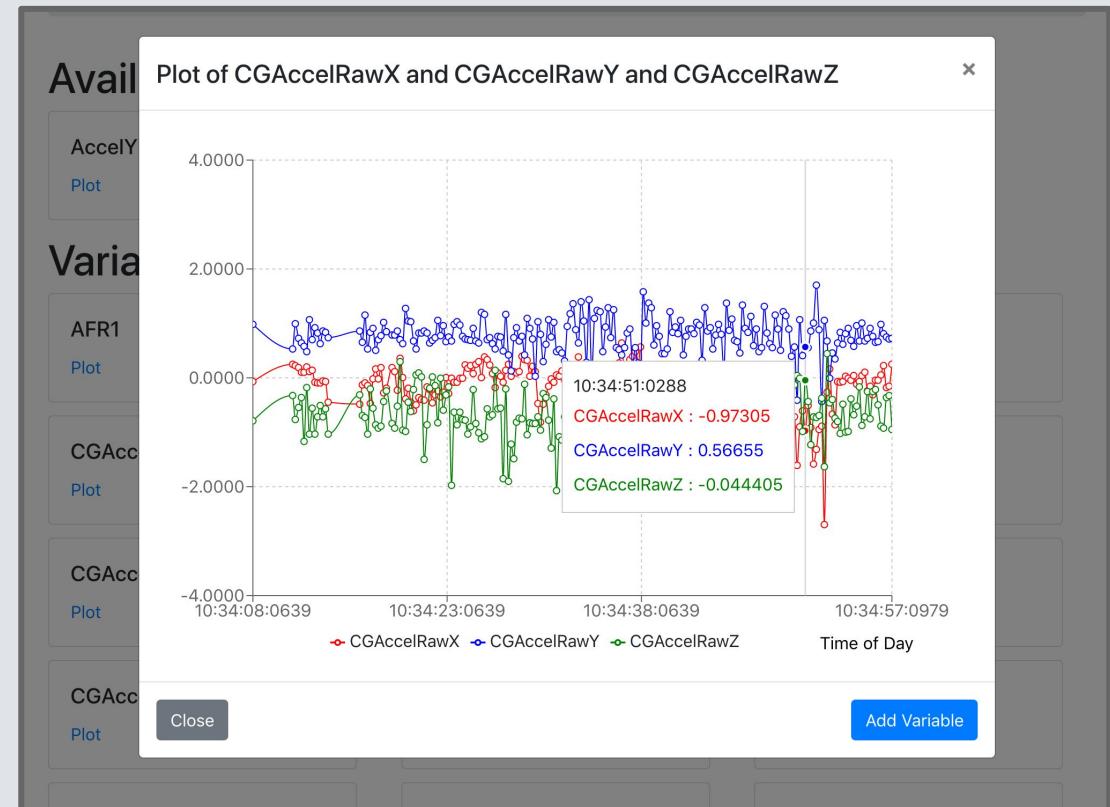
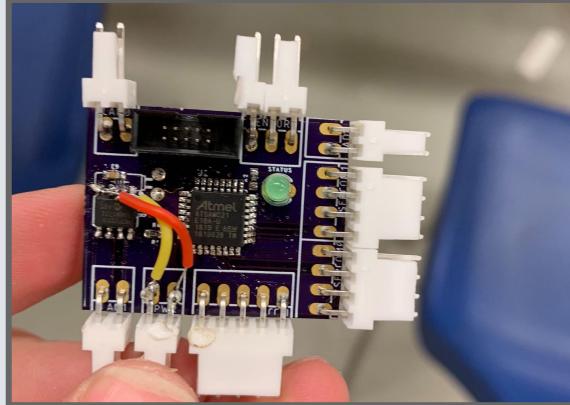
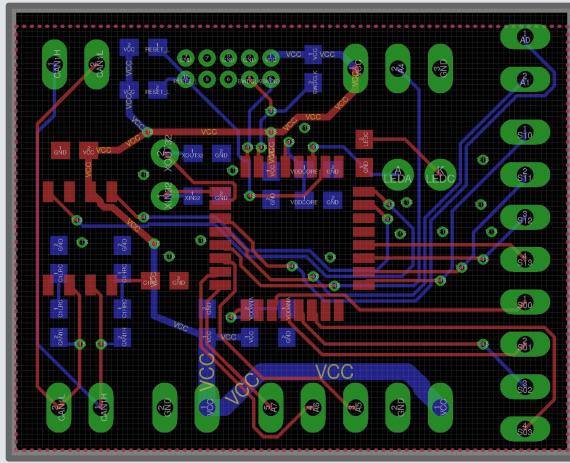
ELECTRONICS

Shannon Coupland

DATA ACQUISITION

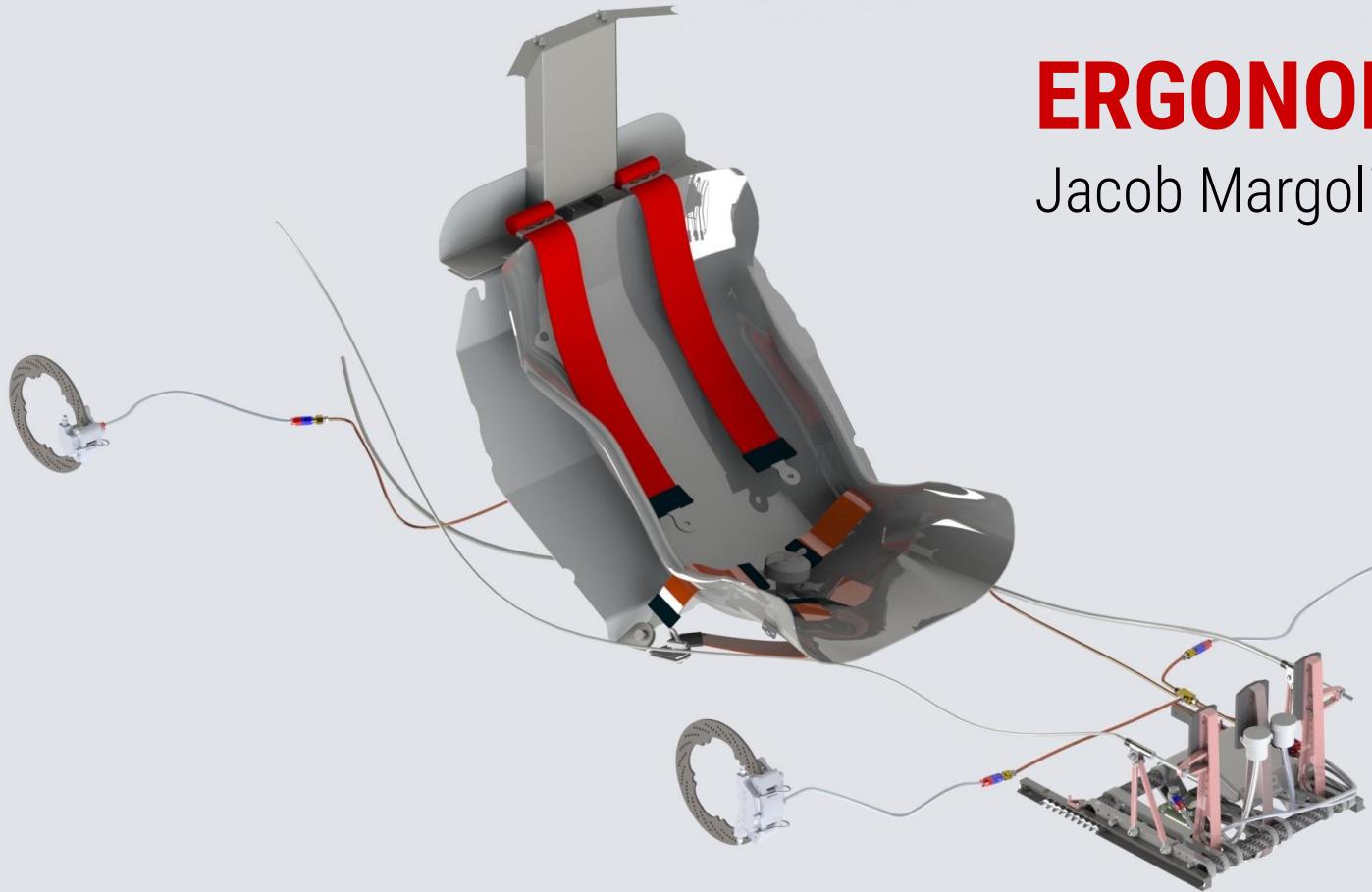
Thomas Kelly

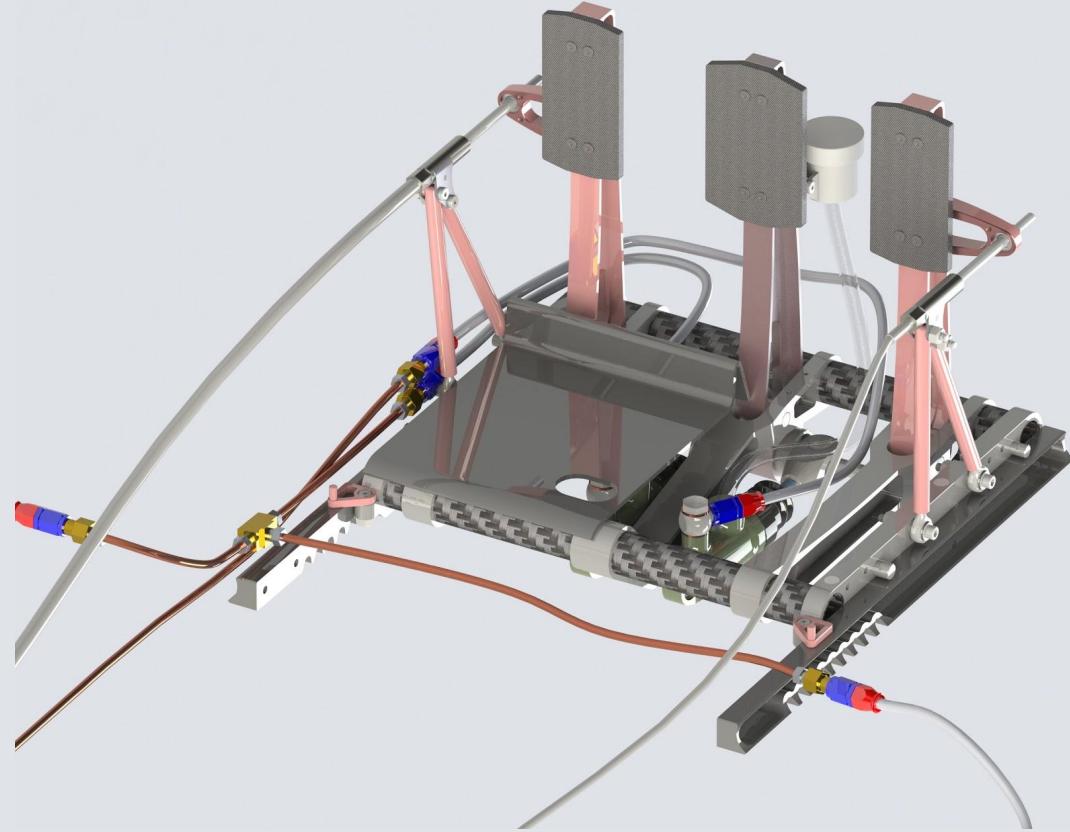
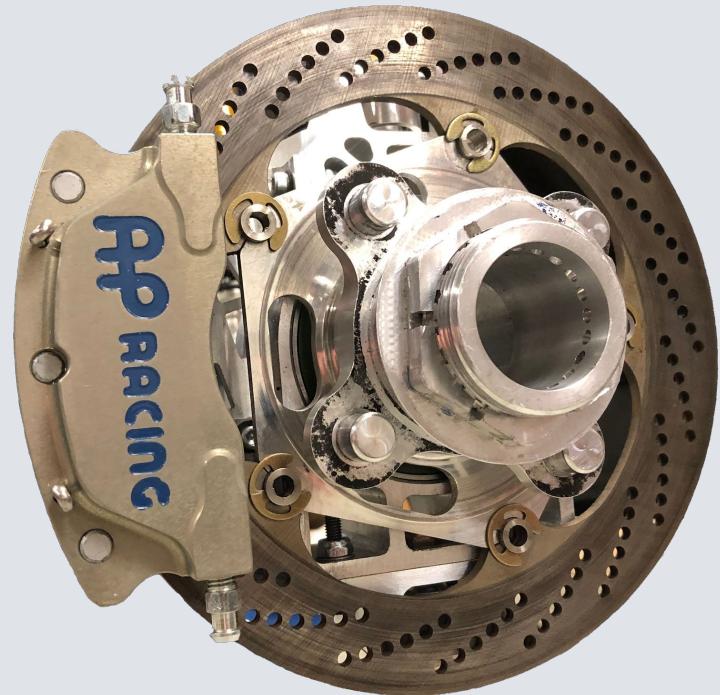




ERGONOMICS

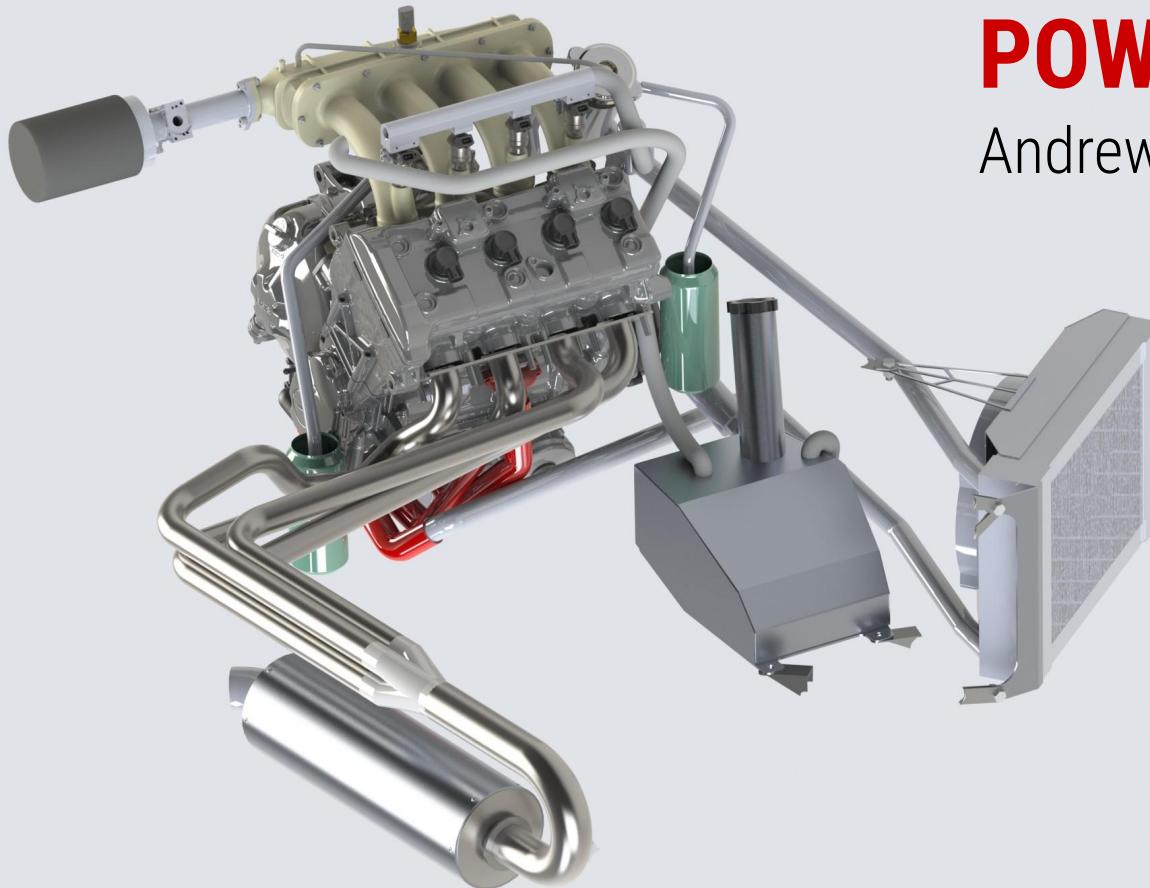
Jacob Margolin

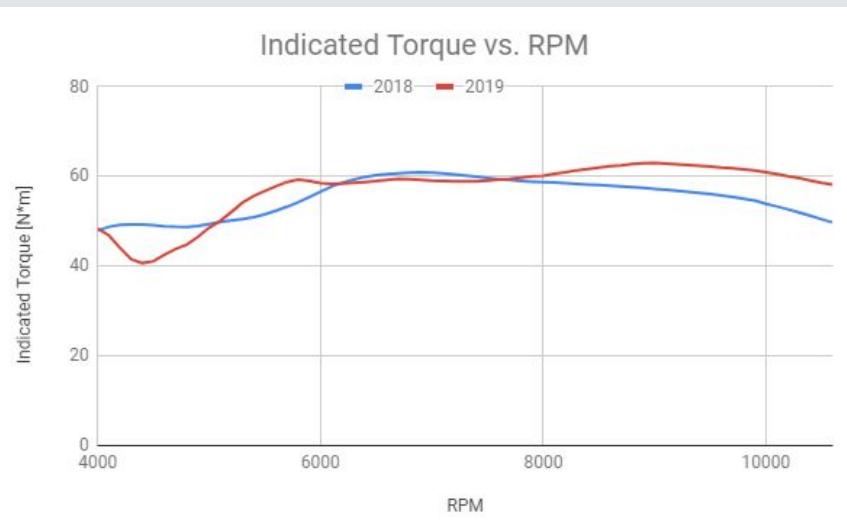




POWERTRAIN

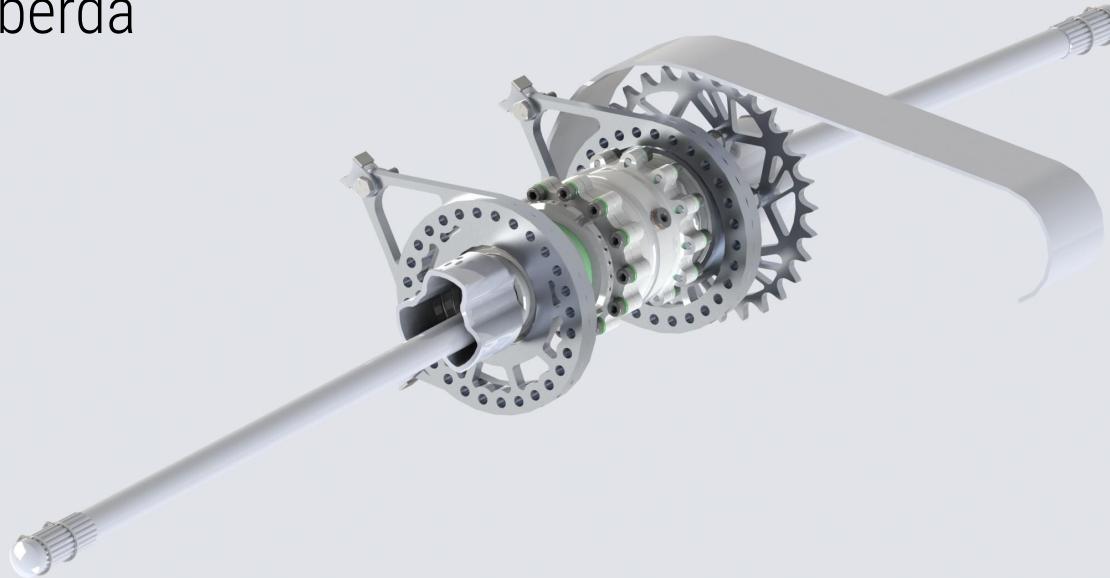
Andrew Bright

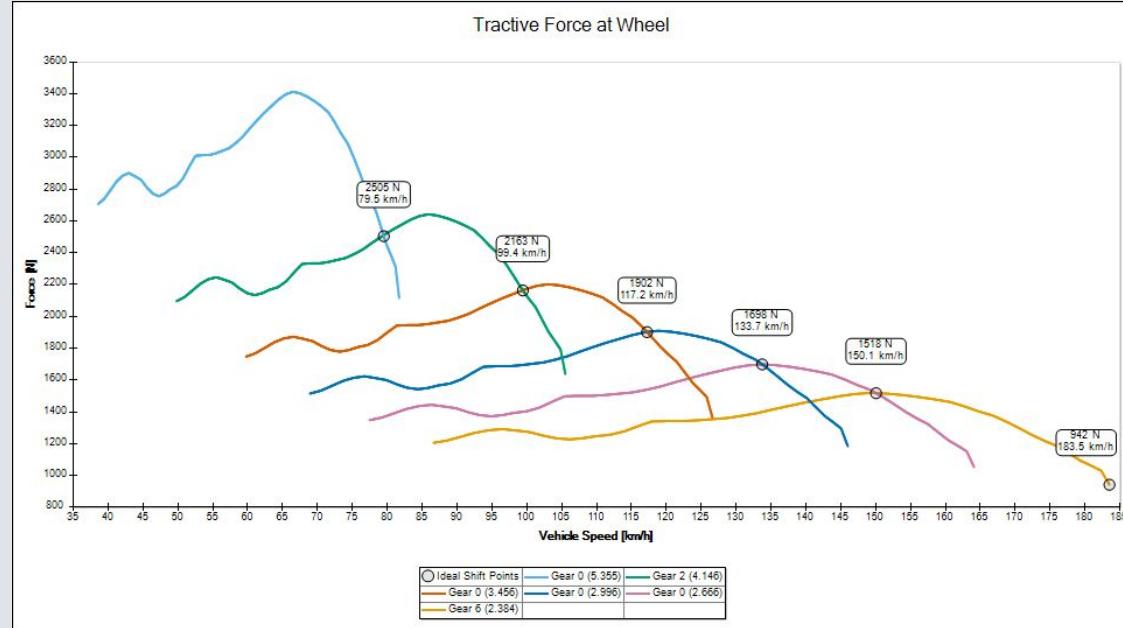
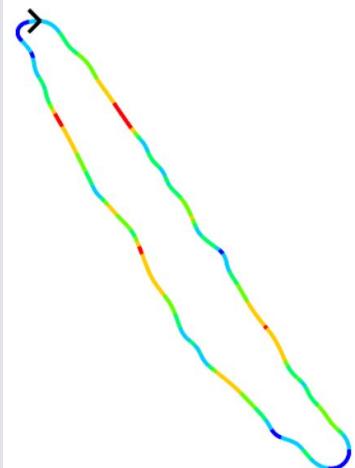




DRIVETRAIN

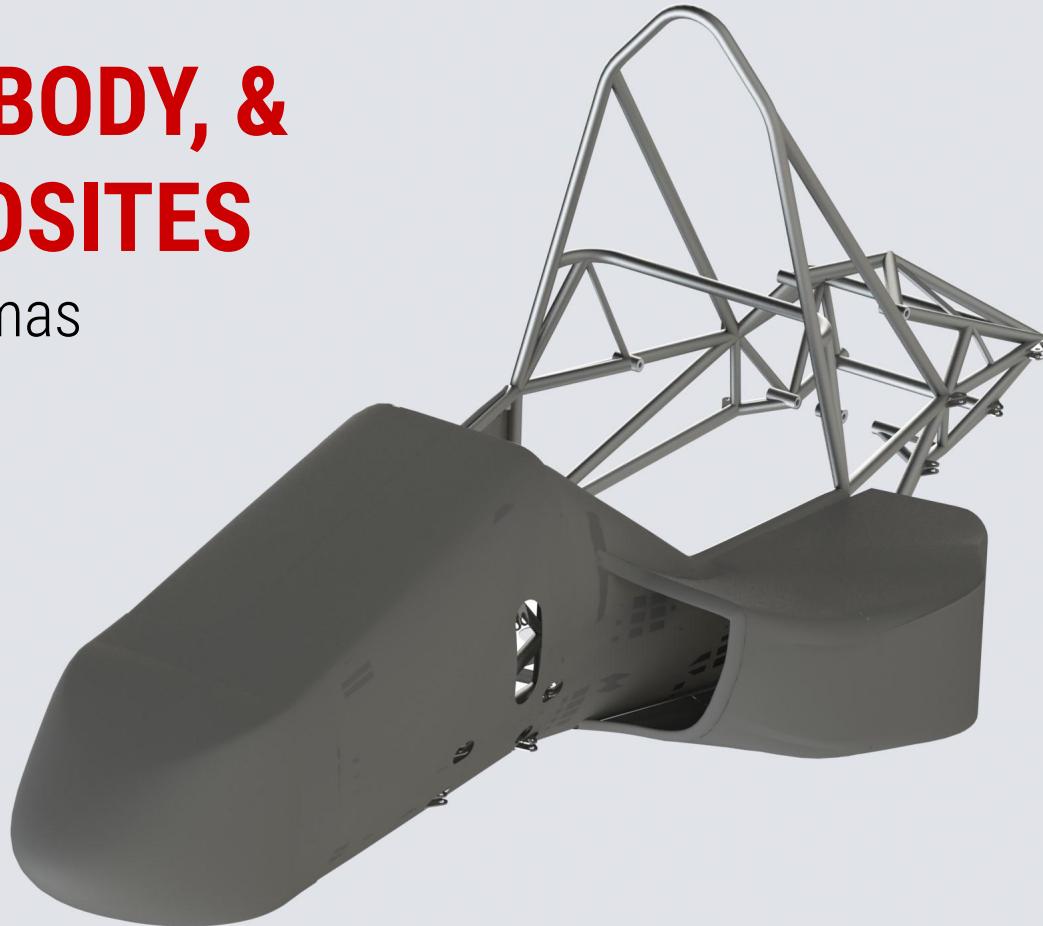
Daniel Luberda

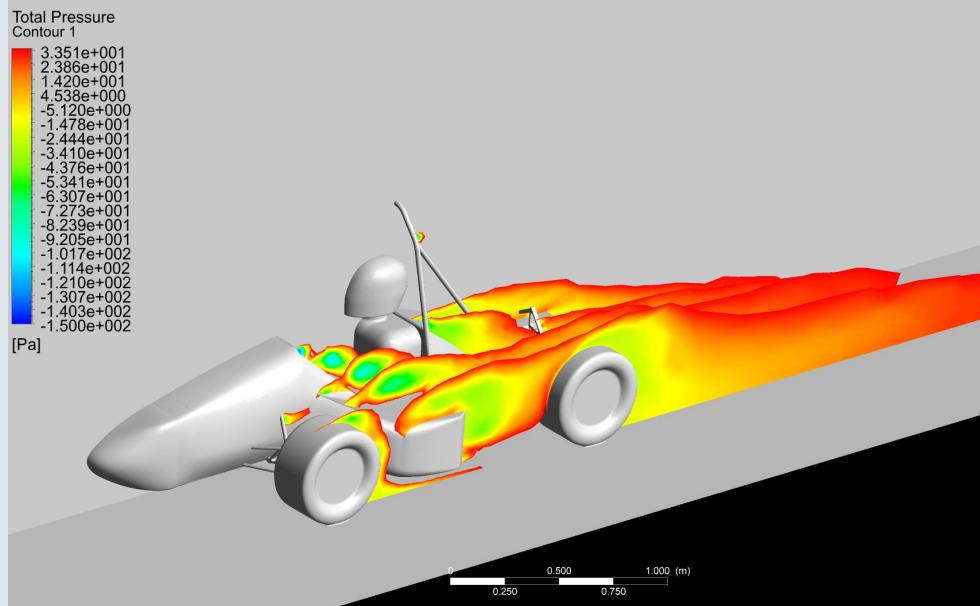




AERO, BODY, & COMPOSITES

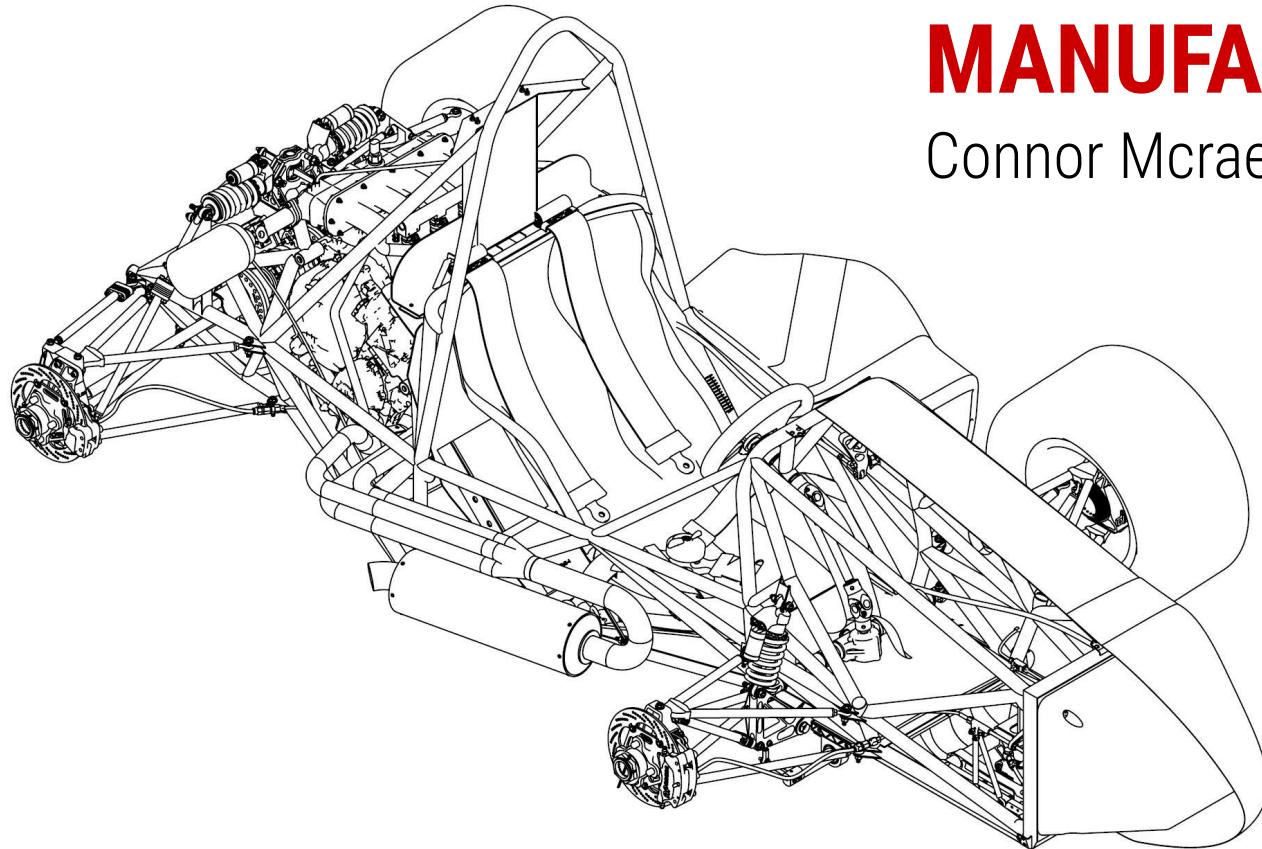
Bryce Thomas

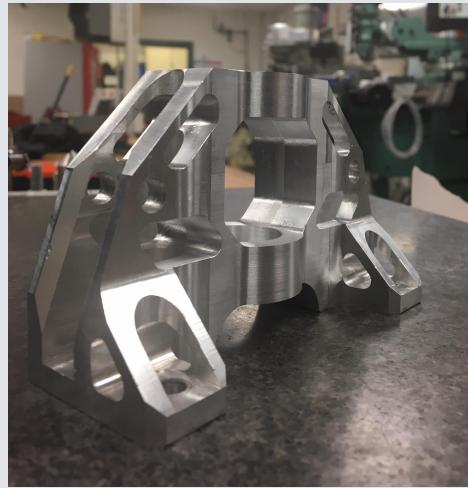




MANUFACTURING

Connor Mcrae



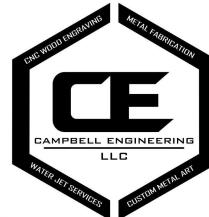


- 830+ parts manufactured in house
- 600+ man-hours of machining time
- 300+ parts on the car

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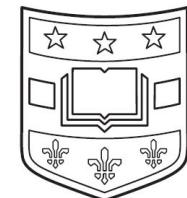
ACCUWRIGHT

texense
sensors by TEXYS

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Special Thanks To



WashU

Mechanical Engineering
& Materials Science

New Exec

- President: Alex Levy
- Vice President: Shannon Coupland
- Technical Lead: Connor McRae
- Project Manager: Alex Dutton
- Treasurer: Mai Urai
- Recruiter: Michael Williams

New Logo

