



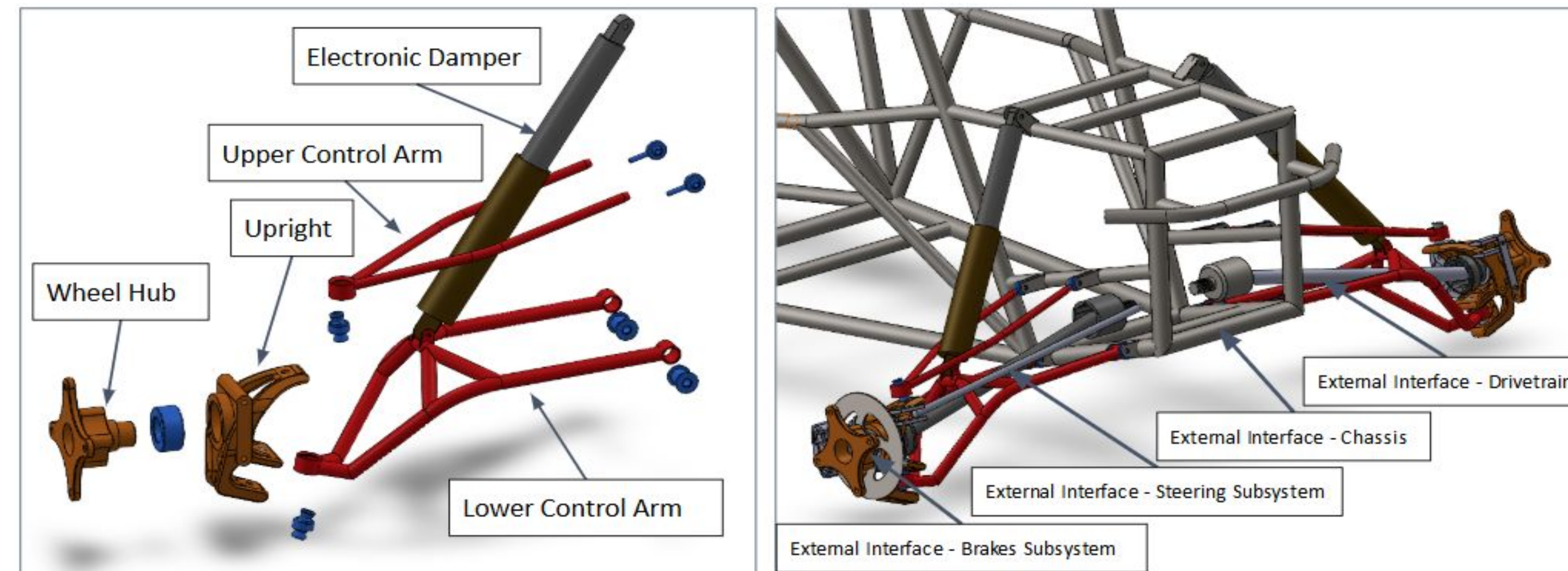
Semi-Active Long Travel Suspension for Off-Road Racing



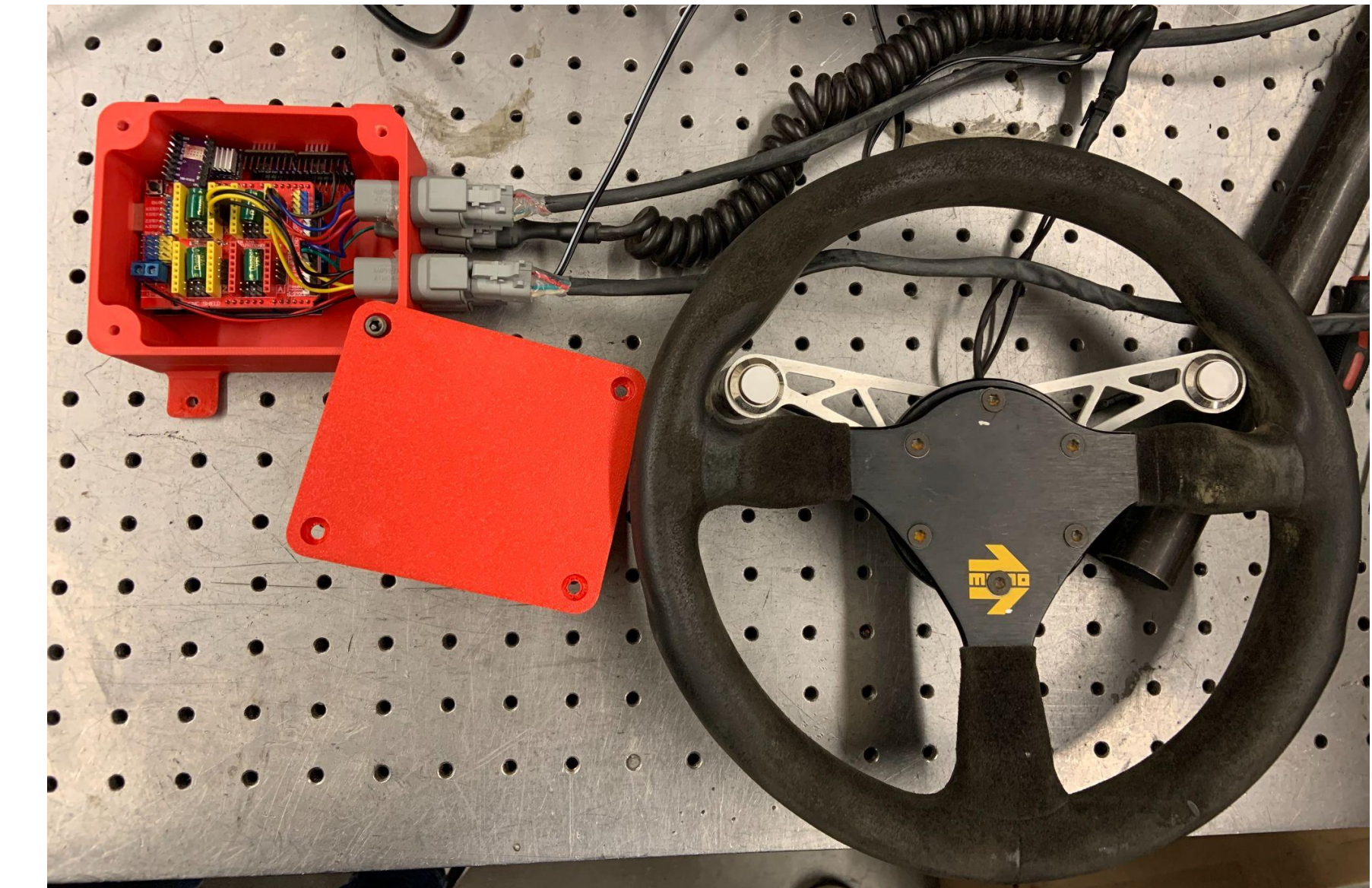
Project Overview

Team S.T.O.R.M. will create an electronically controlled suspension system that provides the driver with an interface to control the ride performance varying on the road condition. User controlled dampers via buttons on steering wheel to achieve stiffness modulation and emergency maximum dampening. Redesigned front and rear suspension geometry in order to reduce turning radius by 10%.

Exploded View



Electrical



Meet Team S.T.O.R.M.



Joshua
Mayo



Marco
Flores



Yadira
Casas

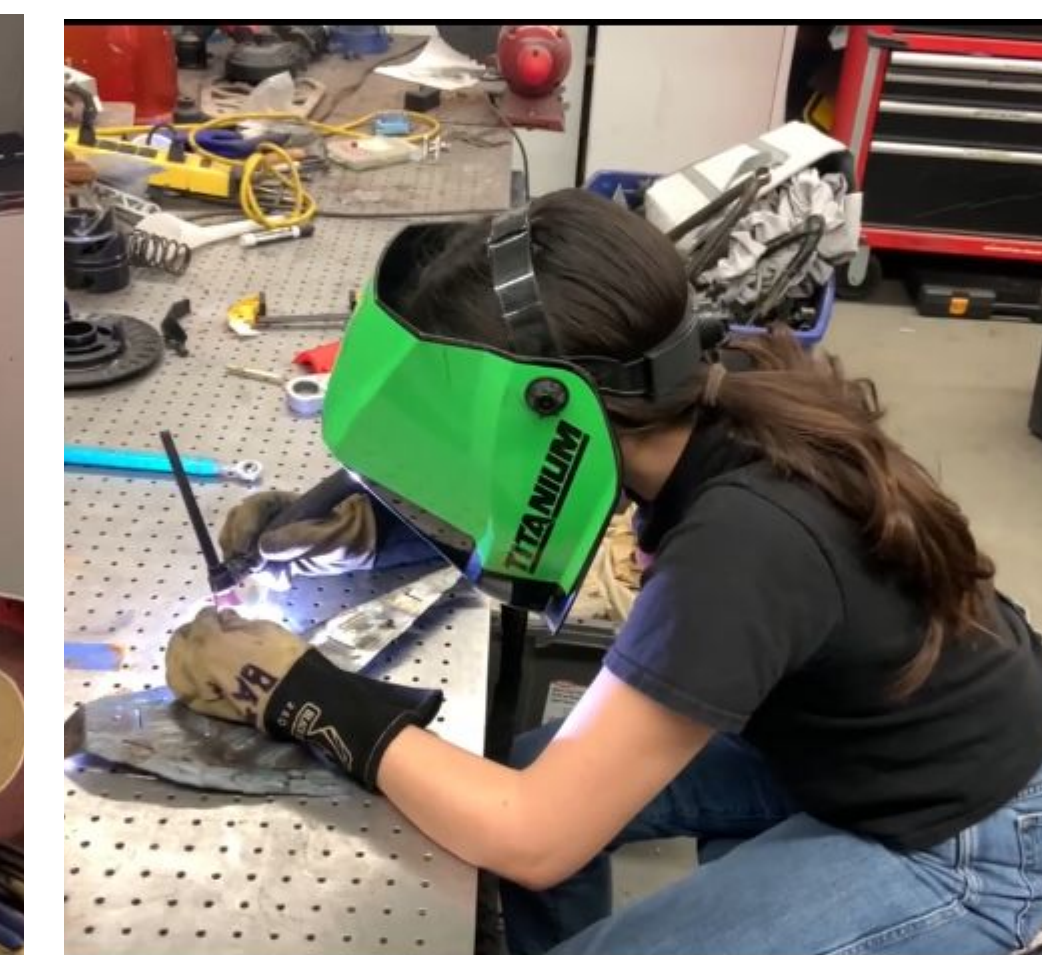
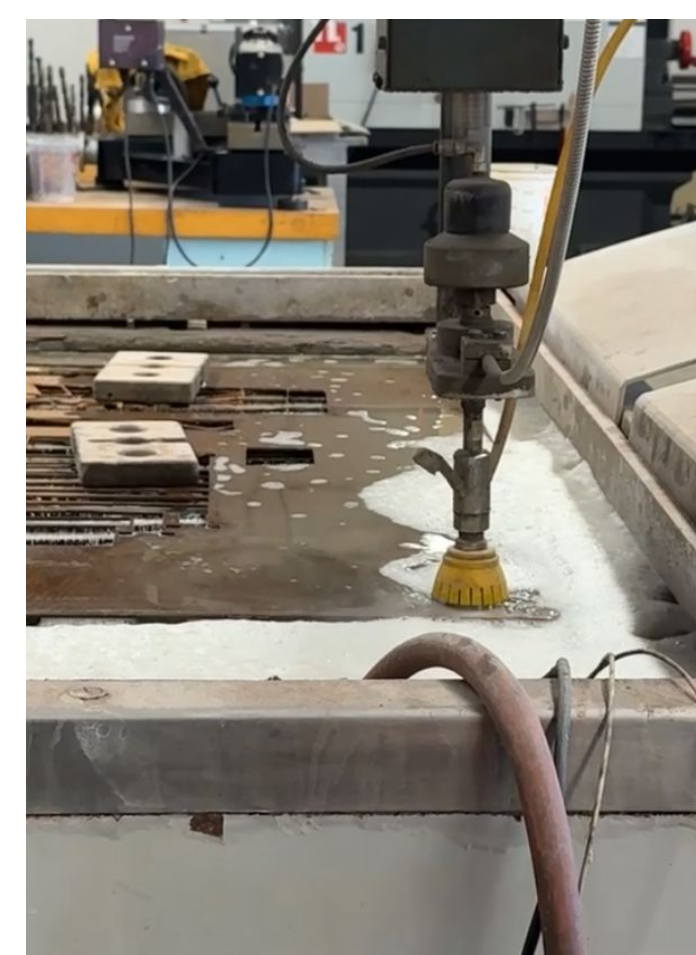


Mason
Carey

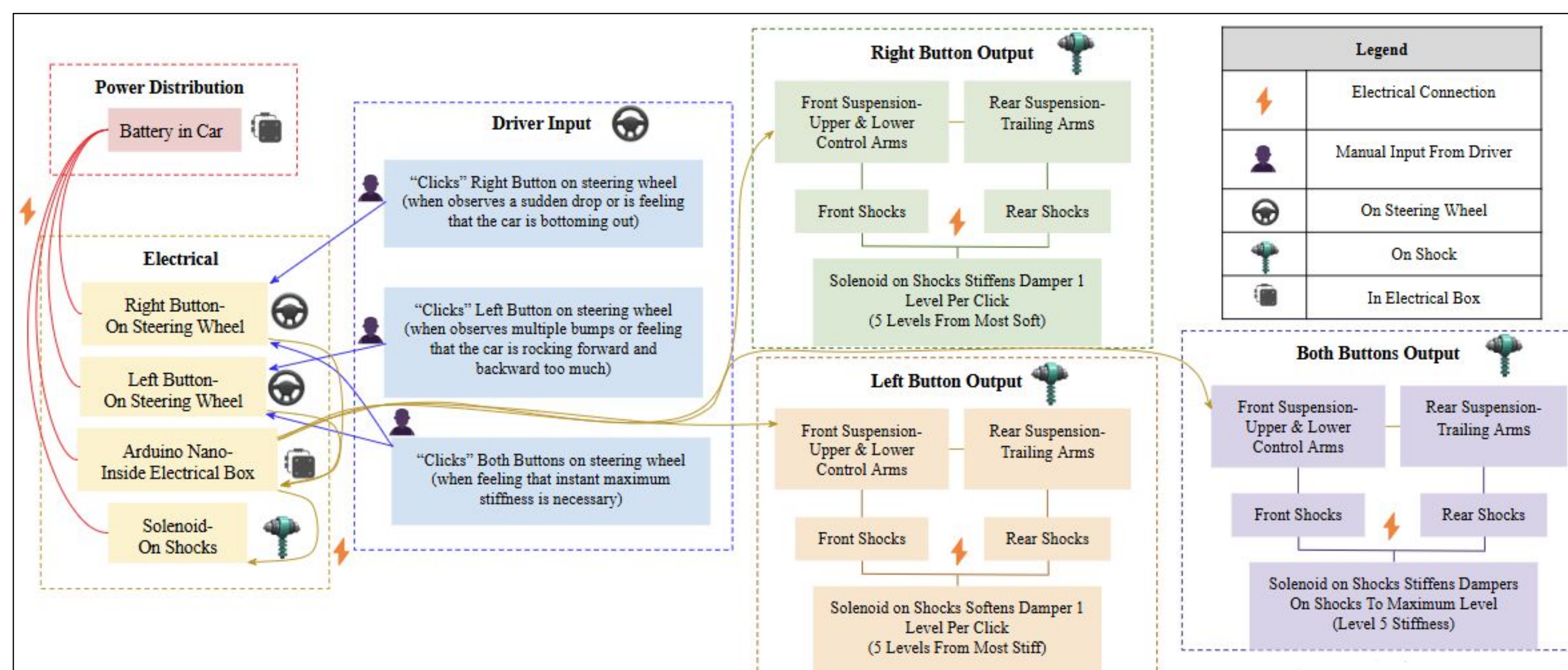


Paulette
Suro

Manufacturing



System Level Diagram



Results

Team S.T.O.R.M. successfully satisfied all of the project deliverables. The newly redesigned suspension geometry integrates properly onto the Baja car's chassis and meets all durability requirements. After testing the turning radius of the vehicle it was shown to have been reduced from 133 inches to 121 inches. The electrically controlled dampers proved to be operational during driving and provided the driver with an interface to control the ride performance varying on the road condition.

