## CLEMSON FSAE

**April Update** 







## **FORMULA SOUTH**

After months of testing and tweaking the vehicle, the team made finishing touches last week before heading out to compete in the first race of the year, Formula South, in Marietta, Georgia to compete with NUMBER other teams. Even though the team had not competed in a formal race event for nearly three years, we re-entered the scene with a bang, taking home the win at Formula South for Clemson. Using this event, the team also monitored the vehicle's performance closely in order to make improvements for the even larger race in Michigan later this year. Without you, the sponsors, none of this would be possible and we thank you all greatly.

## **DYNO DONATION**

In 2020, the team's dyno broke and we have been unable to accurately measure engine performance since. This year, that changed thanks to generous donations from SandVik, Coromant, and Toyota Racing Development. With a new dyno in hand, the team will be able to create a 100 octane and high compression piston tune as well as implement closed-loop fueling. Using this equipment, our team members will be able to learn and implement their engineering skills in even more advanced applications.

## **MEMBER HIGHLIGHT**

Over the last few months, Mingyang Gao – a Senior mechanical engineering student - has been developing both a launch control and throttle by wire system for the vehicle. In order for these systems to function properly, Mingyang has researched how to implement the systems as well as how to tune them, made firmware changes in the vehicle's ECU, and drafted a failure mode and effects analysis for the throttle by wire system. Even when Mingyang gets hung up on an issue, he says the other knowledgeable people on the team are there to help out, making the problem solving process more efficient and far less daunting. No matter what problems he encounters, Mingyang compiles his own knowledge, ability to research, and fellow team members to get the job done

