



CORNELL RACING

The Road To Competition

May 3, 2012

The 2012 Michigan competition is less than a week away! It is an exciting time at the Formula SAE Racing team - ARG12 is finally complete and driving. We are tirelessly preparing for competition and looking forward to seeing our car run at Michigan.

The 2012 car has some significant changes. For the first time, we will be using a Honda CBR 600RR engine, which will replace the Yamaha YZF that has been used over the past several years. Lack of availability for Yamaha replacement parts as well

as continuous problems with the transmission prompted us to change. We have high hopes for our new engine package and the dynamometer testing done thus far has shown that we will have yet another high torque, high horsepower engine package. In addition, we have added two products from the MoTeC line, the M400 and the ADL3, to our engine package. This is a serious investment in our future; the combination of this ECM and data acquisition system will give us better testing capabilities today, and the



addition of traction and launch control in the future. Thirdly, we have designed a whole new suspension system to accommodate 10 inch wheels. Smaller wheels allow us to reduce the unsprung weight (2 pounds per corner) and heat up the tires more quickly while out on the track. This helps the car to put down more power and handle more smoothly in tight corners. Lastly, we purchased a Drexler differential which also provides significant weight savings as well as customizable options. In competition, the new design elements will better utilize the car's power and shave time off our laps.

It has taken considerable time and effort to reach this point, but these advancements showcase the talent and dedication of our past and current members. We could not realize our goals without the guidance and financial support from our alumni. Feel free to visit our website (www.cornellfsae.com) for more engineering and sponsorship updates! We are ready to see to see the results of our hard work on the track at Michigan International Speedway May 9th.

-Matt Byrne & Anthony Lim



An Impressive Beginning

As we reach the end of a very intense design period and begin manufacturing, I can't help but feel that Cornell Racing is a life changing experience. I joined the team in the Fall 2011 as a Systems Engineer M.Eng student. Initially I found it hard to believe that a group of undergraduates were working independently on financing, designing, and building such an intricate vehicle. The energy and desire to succeed amazed me and I felt thankful to have the

privilege to be a part of this team. The amount of knowledge one can amass from being a part of Cornell Racing is one of a kind. Not only do members get to learn about specific parts of a car but they also learn about the other systems and how they interact. In addition, team members have become masters of CAD and FEA analysis software. Most importantly, members get to work as a team where they learn to

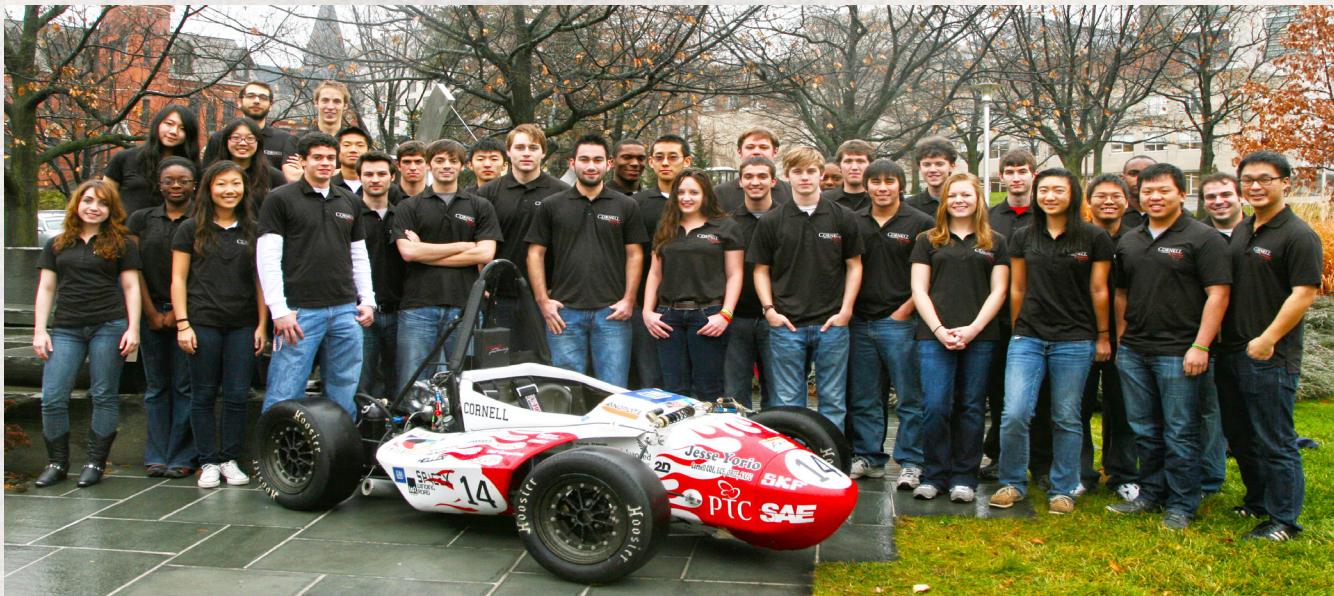
cooperate, communicate, and solve problems as a group.

Cornell Racing is the full package for me and I had the privilege to be a part of this team in a year when a lot of changes were being made to the design. The changes were immense in scope which made creating ARG12 an even bigger challenge. As design and other important

changes were made to accommodate time limitations, further uncertainty is being addressed impressively within the time.

Manufacturing has just started, and hard work is always on the schedule for Cornell Racing. However, it is my firm belief that this kind of hard work is the most rewarding one can get.

-Konstantinos Vilaetis



New Member's Perspective

Joining a project team was not exactly on my to-do list when I first came to Cornell. I had always been a gearhead (growing up in a

diesel engine rebuild shop will do that to you) but never realized that I could work on cars for college credit. My perspective completely changed when I toured the GM lab during my freshman year; at that point, I knew that FSAE was the team for me.

I participated in trial week during Spring 2011 recruitment but was not offered a spot on the team. Although disappointing, that made me realize just how much I wanted to be a part of FSAE. Needless to say, I returned for Fall

2011 recruitment. I truly believe that trying again has been the best decision I've made at Cornell.

This year, I'm a member of the Flow, Monocoque, and Rebuilds subteams. I designed the muffler, tailpipe, and crushable. Being involved with both the Engine and Chassis teams has allowed me to work with some amazing people. The long hours and tedious design work wear on me after a while, but being a part of the most dedicated and relentless group on campus makes every minute absolutely worth it.

-Shelby Hulett

Thanks to our sponsors!

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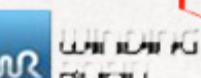
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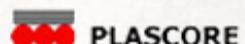
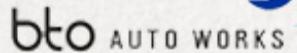


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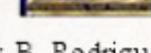
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If you are interested in ordering Cornell Racing Apparel, Please contact Anthony Lim at (770)-633-2605, or ajl266@cornell.edu.

All proceeds will go towards the team. Thank you for supporting us!

Baseball Cap: \$20



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Polo(red or black): \$45



Long Sleeve T-Shirt: \$32



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