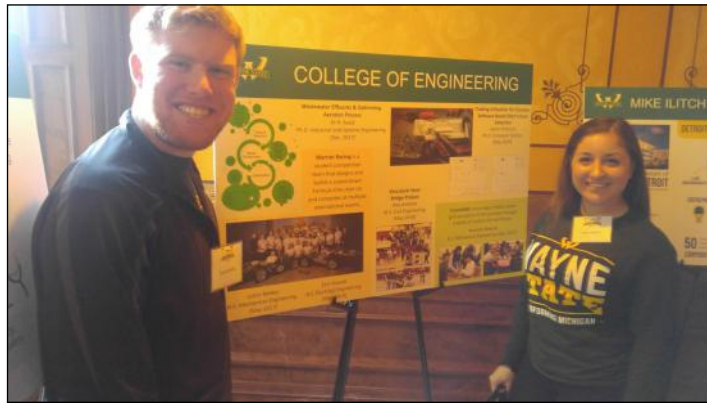




## Warrior Racing

### Warrior Racers Share Experience with State Legislatures

On Tuesday, March 21st, Wayne State University sent over 100 students and faculty from different degree programs to the state capitol in Lansing. Among the representatives were a couple of Warrior Racers, team president Justin Bekker and electrical captain and future business director Erin Kronell.



The students spent the day sharing their experiences with Formula SAE and Wayne State University with state legislatures. Students from Wayne State were also recognized on the floor of the State House of Representatives during their session. University President M. Roy Wilson also made the trip to meet with legislatures and advocate for Wayne State before voting on appropriations. Thank you to the Wayne State

University Office of Government Affairs for organizing this opportunity and for their continued work advocating for Wayne State with state and federal government.



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Chief Editor *Justin Bekker*  
Contributors: *Kristina Vujic,*  
*Adam Niner*

## Chevy Bolt Vehicle Event

The SAE-Detroit Section hosts vehicle events on a bi-monthly basis to showcase new vehicles coming to the market. This month, the subject was the new Chevrolet Bolt. The Detroit Section also invites members of SAE Chapters from the universities in the metro-Detroit area to attend these events. Team members got a chance to network with students from other universities. Engineers involved in the Chevrolet Bolt project presented on the technological innovations, chassis and electrical powertrain on the vehicle. The students were accompanied by Dr. Marcis Jansons, Wayne State University SAE chapter faculty advisor and Roxanne Loeffler, program coordinator for the SAE-Detroit Section. At the end of the event they enjoyed a dinner provided by the SAE-Detroit Section.



## RW11 Frame Testing

The frame of a Formula SAE vehicle is essential to vehicle performance. The frame serves as the mounting point for every component on the car and must be strong and rigid to maintain its shape without bending under loads that are transferred to the frame from the suspension. As with every component on the vehicle, the frame must also weigh as little as possible in order for the vehicle to make the most out of the power produced by the engine. Our frame team led by Brandon Horsch, Sai Prashanth Kamble and Vishal Jaykumar spent the fall trying to optimize these two requirements through CAD design and simulation. Recently our team performed a series of tests to validate those designs. One test was the torsional rigidity test where we simulated the cornering of the vehicle and the twisting action it would create on the frame. Secondly we weighed the frame and did a center of gravity (CG) test to find where the frame's center of mass was. RW11's frame weighs 66.4 lbs.



## Warrior Racing Events

*RW11 Unveil*

*May 6th*

*11:00AM*

*Wayne State College of Engineering*

*Kart2Kart Fundraiser*

*May 7th*

*1:30 PM*

*Kart2Kart of Sterling Heights*



*You are cordially invited to the RW11  
Unveil hosted by Warrior Racing*

*Date: May 6, 2017*

*Time: 11:00AM-2:30PM*

*Location: 5050 Anthony Wayne Drive,  
Detroit MI, 48202, Room 1507*

*Please RSVP to*

*FormulaSAE@wayne.edu*

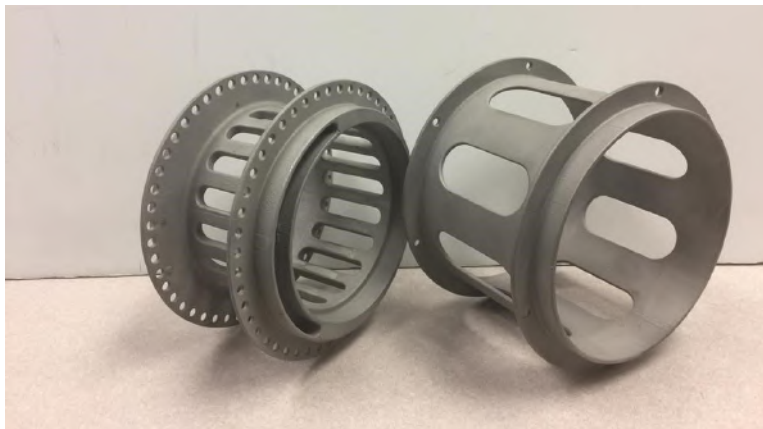
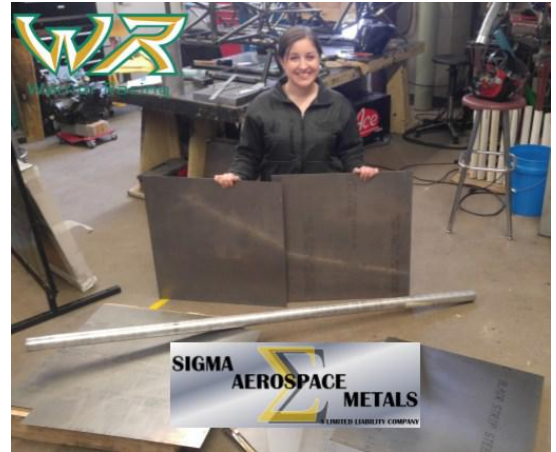


# Sponsor Updates



<https://www.sigmaaero.com/>

We would like to thank Sigma Aerospace Metals for supporting us for the second year in a row by donating aluminum and steel we will use to complete the manufacturing of RW11!



## ARISTO CAST INVESTMENT CASTING

<http://www.aristo-cast.com>

Do you need to cast parts with amazing quality? Then Aristo -Cast Inc is your source. They generously sponsored our team with cast differential cylinders for our newest car, RW11. Thank you for these amazing parts in such a quick turn around!

# Sponsor Updates



<http://graphimaterials.com/>

Thank you to Graphi Materials for providing us with this high strength carbon as we use it for some top secret R&D. We can't wait to show you our prototypes. in the near future.



<http://www.woolfaircraft.com/index.html>

The powertrain team got a major boost with the arrival of our bent tubes from Woolf Aircraft! Woolf supplied the bending for intake, exhaust and cooling tubes which are sure to keep RW11 running strong this season! Thank you Woolf!

# Sponsor Updates



<http://www.synergeering.com/>

When it comes to rapid prototype pieces, we know we can rely on our long time supporter Synergeering Group, LLC to help us out with our needs!

Check out our sweet intake that we got back from them!  
We can't wait to see how it performs on the track!



<http://teamtechmotorsports.com/>

Shout out to our sponsor TEAMTECH for their awesome seat belts. These things keep our drivers safe in the car while still being comfortable!

# Sponsor Updates



<http://www.ostool.net/>

Thank you O&S Tool Inc. for helping our suspension team with our A-arm tube crushers! Without these, our A-arms would never be a reality!



OPUSMACH

<http://opusmach.com/>

Huge thank you to Opus Mach for manufacturing our steering gearbox housing and differential mounts. Opus Mach is a great company to work with and went from design to finished parts in less than a week. We couldn't do it without you!



# Warrior Racing 2016-2017 Sponsors

*Our team's success is made possible through the generous donations and support from the following companies. Without them our team would not have the resources needed to provide invaluable hands on experience and to manufacture our formula cars. From all members of our team, thank you Warrior Racing sponsors!*

## Detroit Legacy



**Bolton Works**



**CAMMAND MACHINING LLC**



**GT**



**Gamma  
Technologies**



FIAT CHRYSLER AUTOMOBILES

## Motor City



**PROTO CAST, INC.**



**DENSO**



**ENGINE LAB**





# Platinum



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ALUMINUM



# Gold



**FENESS Engineering**



# silver



# Bronze



# Special Thanks

Dr. Michele Grimm  
Carl Occhialini  
Jim Vito  
Dave Chegash  
Lex Dodson  
Randy Krol

Michael Royce  
Suzanne Royce  
The Niner Family  
The Bekker Family  
The Le Page Family



## Contact Information & Media Sites

5050 Anthony Wayne Drive  
Suite 1530  
Detroit, MI 48202

Office Phone - 313.577.3829

Website - [fsae.eng.wayne.edu](http://fsae.eng.wayne.edu)

Facebook - [facebook.com/WSUWarriorRacing](https://www.facebook.com/WSUWarriorRacing)

Instagram - <https://www.instagram.com/waynestatefsae/>

YouTube - [youtube.com/wsuarriorracing](https://www.youtube.com/wsuarriorracing)

President Justin Bekker

[Justin.bekker@wayne.edu](mailto:Justin.bekker@wayne.edu)

Business Director Filippo Caro

[Filippo.caro@wayne.edu](mailto:Filippo.caro@wayne.edu)