North American International Auto Show: Detroit, Michigan

January 2016 Benjamin Boyd Lake Campus Engineering Student

Fourteen students in the Mechanical Engineering program at Wright State University - Lake Campus had the opportunity to visit the North American International Auto Show this past weekend in Detroit, Michigan. The students are members of the Wright State University Lake Engineering Club.

The club attended the Auto Show to learn more about the automobile industry as a potential future career field. The convention hosted approximately 40 highly recognized automobile manufacturers from various countries around the world displaying their newest concept vehicle designs as shown in figures 1 and 2 below. We inspected vehicles from several companies such as General Motors, Porsche, Ford, Honda, Audi, BMW and many others.



Figure 1. 2016 Dodge Viper



Figure 2. 2016 Toyota Electric Concept Car

During the student's visit, they had the opportunity to view many new model designs, which will be released for production soon. Also, we were able to read about and see actual concept design cars manufacturers are developing. Some of the interesting vehicles were multi-terrain, fuel-efficient, and aerodynamic-efficient vehicles.

A main concept multiple manufacturers are working towards are Hydrogen cell powered vehicle, where the vehicle runs on hydrogen and emits H_2O instead of CO_2 gas. Many corporate presenters lectured on specific vehicles and how their company's vehicle may differ from others. One interesting concept car was designed for the 'fun look of it', such as the car designed as a Storm Trooper Helmet from the movie series Star Wars shown in Figure 3 below.



Figure 3. Fiat 500e Stormtrooper Vehicle

One student Mr. Matt Carter, a senior in the Mechanical Engineering program, described his experience by saying, "I had a blast at the Detroit Auto show. Being a car enthusiast I had a great appreciation for new technology in the automotive world. Most of the time at the show was spent touring the booths and taking time to see new vehicles and even sit behind the wheel of some as well. The amount of interactive activities in the booths proved to be educational and fun with some of the new automotive features. I would recommend this trip to anyone, even non-car enthusiasts. I would definitely consider returning to this event next year."

Another student, Mr. Nick Daeger, a junior in the Mechanical Engineering program stated, "My favorite part was seeing the latest and greatest cars while being able to sit in beautiful cars I'll probably never be able to purchase. I liked it a lot and would go back again. It is something you definitely need to see once."



Figure 4. Nick Daeger and Marrisa Bullens in front of 2016 Corvette

Benjamin Boyd, another junior in the Mechanical Engineering program stated, "My favorite part of the convention was seeing the prototype display models of the engines outside the car for many of the designs. It gave me a clear view of the entire scaled engine and amazed me by how complex the engine design is alone. The amount of time and engineering must have been enormous. Also, I had fun spending some time with three of the freshman students in the program, enjoying the whole experience. We took a photo together in the Chevrolet expo and they cropped our bodies into a photo with the US men's Soccer team. It was a fun time indeed."



Figure 5. On left in blue- Jared Bettinger and Daniel Burd. On right in blue- John Cain and Benjamin Boyd

Overall, the students thoroughly enjoyed their time at the auto show. Many have said they are looking forward to returning next year. It was a great opportunity to spend time with fellow classmates. The event allowed everyone to gain an appreciation of what the automobile industry is like and maybe generate interest in entering this field of engineering as a co-op or after graduation.