

# SIUE Newsletter

# Solar Power!

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## Ennovation



### Inside this Issue

2. My car runs on sun

3. Unmasked

4. October MEET

**T**he sun makes everything more fun. says James Maske member of SIUE solar car club. Solar car club is an active engineering club at SIU Edwardsville, IL comprised of students who design, build, and race solar powered cars. However, this is a project that requires students to come from different majors running the gamut from engineering to business. The solar car team is managed by student directors, working to enable its members to learn more about solar energy. Members will also be able to apply class theory to real world applications, and benefit from a diversity of majors. Every year, there is an annual solar car competition held in Austin, Tx. The name of this competition is called the Formula Sun Grand Prix.

# No Gas Required My Car Runs On Sun

No more going to the gas station to fill up, as long as your vehicle is out in the sun you will be ready to go at all times. That would be an alternative solution to always having to pay for gasoline, however, for members of the SIUE solar car team this solution is reality. I had the opportunity of speaking with the director of development on the team, named Christopher James Maske. Maske, is a junior at SIUE majoring in engineering. He has been on the team for a year, and is hoping that will help him achieve some of his goals while in college and beyond.

A solar car is an electric vehicle powered by solar energy. In short solar energy is converted into electric energy with the use of photovoltaic in a solar panel, and here is where the magic happens. The term solar car indicates that solar energy is used in some if not all of a vehicle's propulsion. It is fascinating, however, there aren't more being manufactured and shipped. Because, it isn't easy; the solar vehicle itself does come with limitations, specifically with cost, and Photovoltaic cells or (PV) which converts the sun's energy into electric energy. The creation of PV cells can be very expensive let alone the solar array itself is constrained by a vehicle's size. Maske, when asked about solar car's being the future said, "We should see more production of solar cars in the not too distant future, but as far as them being on the market it will still take some time."



As the director of development Maske has been exposed to copious amount of different parts that make up the car, however there is hardly ever any waste because of the team being resourceful. The battery is made up of lithium iron phosphate, in his words "The batteries are extremely efficient and lightweight, however they are very volatile. And if you don't have a battery management system you run the risk of burning up your car." Maske said this happened to a team when they attended the yearly solar car competition in Austin, Texas last year. On the other hand the SIUE solar car team hasn't had a problem with this. As the director of development this is something that can't be overlooked. In short, all the intricacies of developing this vehicle fall under attention to the finest detail. One slip up could be the difference between success, and failure.

The preamble to the constitution of the SIUE solar racing team is, "The purpose of the organization is to develop solar cars in order to race them competitively. It is our desire to expand the general knowledge of alternative energy sources, particularly solar power, to the university and to the community." With 30 active, 6 to 7 directors, and 2 faculty advisors, the solar racing team is taking a step into the future. On the contrary for this team the future is now.

# UnMasked

Into the mind of Maske, an engineering student at SIUE. What immediately stands out about Maske is his quiet assassin personality. As an engineering student, Maske is always planning, making moves, and improving himself. Maske, was born and raised in Saint Peter, IL. and graduated from Vandalia community high school. While growing up in his hometown he discovered his love for engineering. "My dad was a mechanic and a jack of all trades," Maske states. Maske's father, James Maske, used to race stock cars at the local race track and built their current home by himself. Maske senior, also helped build a church that is in Christopher's hometown today. Being a part of SIUE's solar car team has helped Maske determine where he wants to go in his future. He has been a member for a year now, and as director of development he oversees projects, helps gather material, and test drives the car. Maske hopes to one day win the yearly solar competition in Austin, Texas.



Now aside from the fact that Maske spends a large amount of time studying, his hobbies and interests are like any other college student. Maske is an avid gamer, who loves legos, and hiking. After 30 to 40 hours of weekly studying, Maske unwinds with his favorite hobbies. However, when it time to get down to business Maske does not like to waste time. "Repeated failure," is what Maske said when asked about his biggest pet peeve. He can't stand getting an answer wrong on a problem repeatedly. Maske will dedicate his energy to solving any problem that he comes across that otherwise will have been left unanswered. What is polarizing is the amount of time Maske devotes to his craft. If you ever need help with a problem or if something needs to be fixed Maske will be there.

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# OCTOBER MEET!

Every Friday The SIUE solar car club meets in the engineering building. It is here the club discusses upcoming events, plans, as well as structure and design for the solar car.



To whom this may concern:

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