



Spring Update - Audi TT SAEV Named 'Best in Show'

After many months of hard work, the Solar Jackets team recently reached new ground with their Solar-Assisted Electric Vehicle (SAEV). The SAEV won Best Alternative Fuel Vehicle in the seventh annual Georgia Tech Auto Show this April. This past year, the Audi has been featured on Wired Magazine's website, on the Georgia Tech Greenbuzz website, at several Atlanta-area events, and on the Georgia Tech campus.

Additionally, the team engineered electric power steering and braking systems that preserve the agile and sporty feel of the original gas-engine car. Upgraded Exide batteries reduce the vehicle's weight and increase performance while the new Solar Tracker logs an average 75 Watts of power from the thin-film solar cells plastered on the roof and hood of the car - enough to keep the auxiliary system powered-up on a sunny day. The auxiliary system, which draws electricity from a battery charged by the solar cells, includes the power windows, locks, steering, brakes, radio, lights, and more. The Audi's 120V battery pack, charged through an extension cord that cleverly extends from the gas cap, powers the electric drive system, featuring a single DC motor from Advanced Motors and Drives that produces enough torque to start the car in fifth gear.

Next Project - Solar Racer

As the team continues to modify and improve the SAEV, we are also beginning our competition solar car. This is a sleek, lightweight endurance vehicle built to compete in the 2011 Global Green Challenge in Australia. A 3000km, six-day race from one end of Australia to the other, the Global Green Challenge is the pinnacle of solar racing events worldwide. We will be an important competitor among several universities and companies gathered to showcase the world's premier solar-electric vehicle technology.





The car (CAD model pictured left) will accommodate high-voltage power electronics, telemetric systems, composites fabrication, efficient power management, sound mechanical construction, and streamlined aerodynamics. The Solar Jackets will put thousands of hours of work into this race car over the next year-and-a-half as we endeavor to create one of the world's best solar cars.

A Little More About the Solar Jackets

The Solar Jackets is a dynamic group of multi-disciplinary undergraduate and graduate students that draws most of its members from Georgia Tech's College of Engineering, which ranks 4th in the nation for both Undergraduate and Graduate Programs according to the U.S. News and World Report.

The Solar Jackets operates with two key objectives - to advance green energy technology while cultivating formidable, hands on engineering and leadership experiences for undergraduate and graduate students of all majors. Georgia Tech is one of fifteen universities to have received a top score in 2010 from the Princeton Review for their break-through green efforts, and, likewise, Tech's ongoing green initiatives attract national attention. The Solar Jackets is a student-run organization, built on the dedication and ambition of its members. Our projects promote cross-disciplinary learning and interaction, necessitating engineering excellence, leadership, and teamwork from all students involved. Given the engineering rigor of our projects, the material that students learn in the classroom directly applies to the design and fabrication of our vehicles. Additionally, we use our resources to promote engineering and technical education to Atlanta-area elementary, middle, and high school students.

Thank You To Our Sponsors!

The Solar Jackets greatly appreciates the generous contributions from our sponsors, as our work would not be possible without it. If there is anything that we can do to better serve you, please let us know!

Contact Information:

Corbin Klett, President

Email: cklett3@gatech.edu

Phone: 770.718.8510

