

ChargeCar Open House

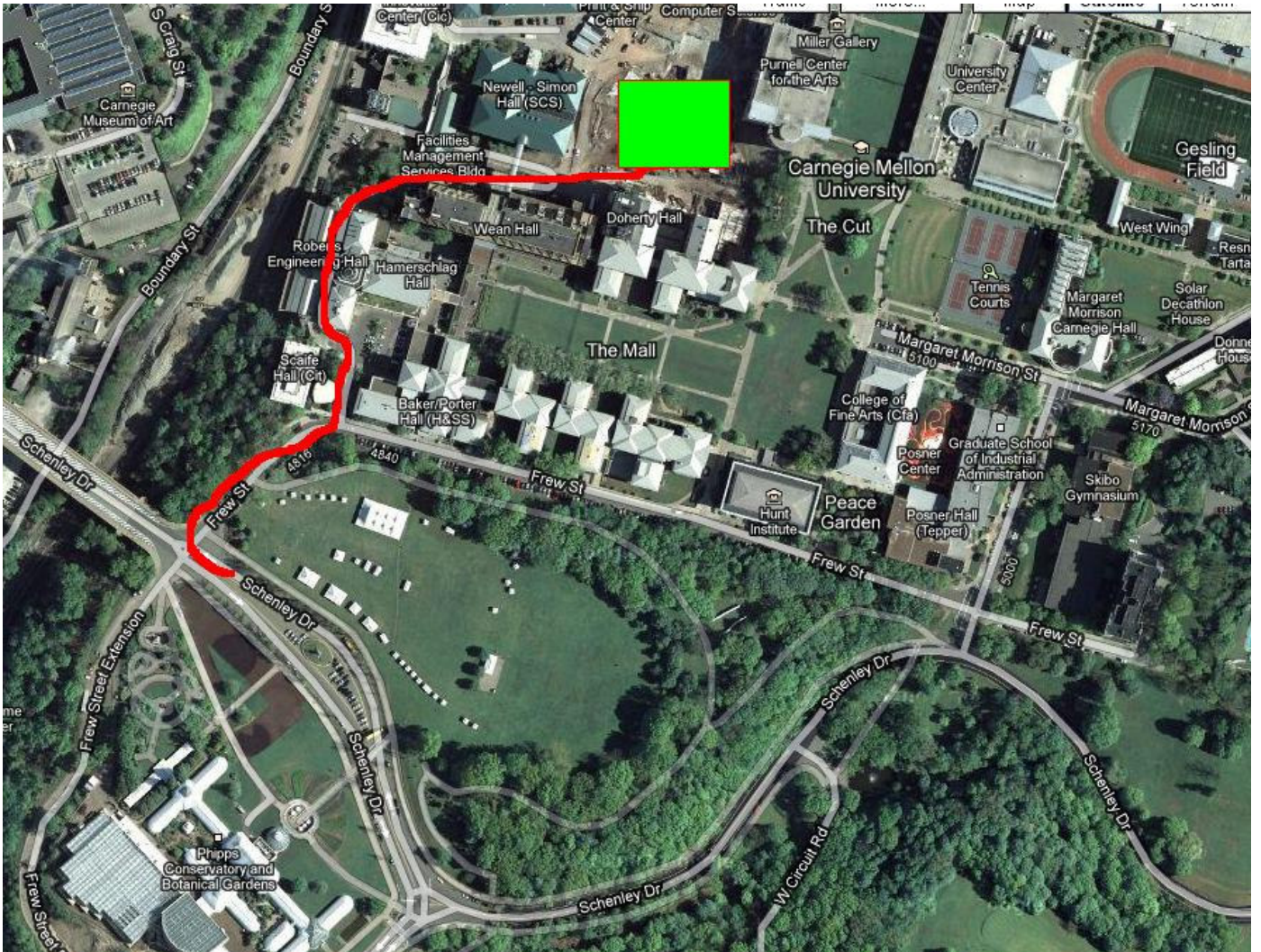
- What:** An introduction to our new region-wide electric car initiative
- When:** Friday, 26 March, 4PM – 6PM
- Who:** Everyone who wants to revolutionize electric car transportation in our region
- Where:** Planetary Robotics Center Highbay, Gates Computer Science, Carnegie Mellon University
- Contact:** Byron Spice, 412-268-9068, bspice@cs.cmu.edu

Walking Directions

The Planetary Robotics Center Highbay is on the first floor of Gates Computer Science on Carnegie Mellon's main campus. Take elevators to the first floor, then follow the signs to the ChargeCar Open House.

Driving Directions

We have secured free parking for the open house in the Gates building's parking garage, which is right next to the Planetary Robotics Highbay. Starting at Phipps Conservatory, drive toward Oakland on Schenley Drive then turn right onto Frew Street. Take the first left, then turn left again to drive on the road through campus, alongside Roberts Engineering Hall. The road reaches a turnaround, where you will see the new Gates building in front and to your left. The parking garage is under the building and Planetary Robotics is directly next to it. Look for the ChargeCar signs.



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Carnegie Mellon Open House Seeks Mechanics and Community Members Who Want to Help Convert Cars From Gas to Electric

PITTSBURGH—Mechanics, students and community members interested in converting vehicles from gas to electric power are invited to look under the hood of the ChargeCar Project's electric vehicle program during an open house at 4:00 p.m. Friday March 26 at Carnegie Mellon University's Robotics Institute.

A prototype ultracapacitor-battery electric vehicle, a converted 2006 Scion xB, will be on display in the Planetary Robotics Center high bay on the first floor of the Gates and Hillman centers, 4902 Forbes Ave., together with a RAV4-EV all-electric commercial vehicle. Talks aimed at students, mechanics and community members who would like to be involved in creating a new industry of electric car conversions in the Pittsburgh region will begin at 4:30 p.m.

“With the ChargeCar Project, we intend to show that gas-powered cars can be converted successfully into leading-edge electrically-powered commuter vehicles and to develop a network of local mechanics who can perform these conversions,” said Illah Nourbakhsh, associate professor of robotics. “We’re ready to take the next step in this effort and are looking for mechanics, student researchers and enthusiasts who are eager to take that step with us.”

This spring, Nourbakhsh and program manager Gregg Podnar, co-directors of the ChargeCar Project, will be converting a second car, which will serve as a prototype for subsequent conversions throughout the region. By involving some local mechanics in this conversion, they plan to begin the process of moving the location of future conversions from the campus to commercial garages in the Pittsburgh area.

“We eventually will be referring Pittsburgh residents who want electric vehicles to a network of local mechanics who are trained to convert several popular models of small cars,” Podnar said. “But first we will need help from mechanics, students and others who share our vision and are willing to share their

talents with us as we create our prototype. We hope to recruit some of those people at our upcoming open house.”

Key to the project is a vehicle architecture called smart power management, which uses artificial intelligence to manage the flow of power between conventional electric car batteries and a device called a supercapacitor. Supercapacitors are capacitors with unusually high power density and have typically been used to start locomotives, tanks and diesel trucks. Because it can store and rapidly release large amounts of electrical power, a supercapacitor can serve as a buffer between the battery pack and the vehicle’s electric motors, improving the vehicle’s responsiveness while reducing the charge/discharge cycling that shortens battery life.

All entrances to the Gates and Hillman centers are on floors 3-5; to reach the open house in the Planetary Robotics Center high bay, visitors should take the elevator to the first floor. Free parking is available in the Gates parking lot, located underneath the Gates Computer Science building.

More information, including directions to the open house, is available at the project Web site, <http://chargecar.org>.

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About Carnegie Mellon: Carnegie Mellon (www.cmu.edu) is a private, internationally ranked research university with programs in areas ranging from science, technology and business, to public policy, the humanities and the fine arts. More than 11,000 students in the university’s seven schools and colleges benefit from a small student-to-faculty ratio and an education characterized by its focus on creating and implementing solutions for real problems, interdisciplinary collaboration and innovation. A global university, Carnegie Mellon’s main campus in the United States is in Pittsburgh, Pa. It has campuses in California’s Silicon Valley and Qatar, and programs in Asia, Australia and Europe. The university is in the midst of a \$1 billion fundraising campaign, titled “Inspire Innovation: The Campaign for Carnegie Mellon University,” which aims to build its endowment, support faculty, students and innovative research, and enhance the physical campus with equipment and facility improvements.