



The Energy of the Class of 2015

Duke's new undergraduate class arrives on campus after impressive journeys

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Ryan Toussaint

Ryan Toussaint showed students at his public high school the light, quite literally.

He designed and built a photovoltaic (solar) energy system and wired it through the electrical system of his school in Bloomfield Hills, Mich., just north of Detroit.



Ryan Toussaint with his solar energy system.

The project was how Toussaint, an Eagle Scout, coped with having to sit out his junior year of track because of a back injury. "The doctor said I couldn't exercise," he said, "so I had a lot of time on my hands."

Toussaint created the design as an independent study project his junior year. And it would have remained on paper had the CEO of Michigan CAT not volunteered to cover the cost of the project. Toussaint followed through and got permits, ordered parts, put together the racking system, installed panels and helped wire the system into the school's system.

Among many things, the possibility of living in Smart House drew him to Duke. Toussaint plans to pursue a career in engineering, specifically involving alternative energy and computers. He served a summer internship with the U.S. Department of Defense at its facility in Warren, Mich., working on the type of advanced battery technology that allows cars to run on batteries.

Rounding out his skill set, Toussaint speaks some Japanese, which he learned in his early grade-school years while his father's job transfer took the family to Tokyo for four years. Even at that tender age, he was impressed by the discipline of the Japanese people and the ability of the average citizen to speak several languages. The efficiency and smart use of limited space, in the densely populated city, planted the engineering seed in him.

"I saw how engineering could solve society's problems," he said.