

Baxter Academy's robotics team wins innovation award



Norris Dale

Programmers Julian Bernard and Wil Losereewanich with the robot, Christine. (Coach Ben Bernard with his back turned.)



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PORTLAND, Maine — Baxter Academy for Technology and Science's two-year-old robotics team, the Outliers, won the highest engineering award at the Granite State district event on March 6 in Windham, N.H., during First Robotics' opening weekend of competition in New England.

The team robot, named Christine after Stephen King's fictional car, was proclaimed "a scoring powerhouse." The team now ranks 9th in New England.

Judges awarded the team the Rockwell Automation's Innovation in Control Award for the Outliers' development of a continuously variable transmission, a complex

transmissions technology that is believed to have never been successfully used in First robotics competitions before.

Judges also cited the team's use of an Inertial Measuring Unit for angular position control, as well as the use of a Raspberry Pi for video processing.

A high scorer at the event, the team tied for best Offensive Power Rating for its ability to contribute points in three-team alliance play. The Outliers toggled between first and second in the rankings in qualifying rounds Saturday but slipped to fifth after having to forego a round of play to repair the robot. In the semifinals match, the team was eliminated when an alliance partner lost radio communication with its robot.

Baxter engineering teacher and team mentor, Jonathan Amory, noted that the team had an outstanding performance in the qualifying and final events.

"The robot was one of the most adept on the field for scoring and breaching defenses," Amory said in a press release. "Both in qualifying and playoff rounds, the robot was constantly the best shooter and among the best breachers."

He noted that another Portland team, the Duct-tape Dragons of the Boys and Girls Club, also did well in the finals and is now ranked 20th in New England. "It proves that Maine teams can do well against the larger and better funded teams from New Hampshire, Massachusetts and Rhode Island."

The Outliers will be on the floor again at Maine's Pine Tree district event April 7 and 8, in Lewiston. The team is sponsored by Automation Integrators, Aries Wealth Management, Robotics Institute of Maine, Portland Pie, and Solidworks.

Baxter Academy is a public charter school with students who attend school in Portland daily, commuting from 66 Maine towns. The

Outliers live in 12 Maine towns.