

Illinois Tech Robotics gears up for Jerry Sanders Design Competition

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EDITOR-IN-CHIEF

Illinois Tech Robotics (ITR) is in the midst of preparing for their major competition of the year, the Jerry Sanders Creative Design Competition (JSDC.) JSDC is rapidly approaching and begins on Thursday, March 14, at University of Illinois Urbana-Champaign.

JSDC is a two-day competition sponsored by AMD that ITR competes in each year. JSDC is one of the oldest robotics competitions in America, and routinely draws competitors from schools across the Midwest. This year, approximately 30 robots will compete, representing both the Chicago and Urbana-Champaign campuses of the University of Illinois, College of DuPage, Valparaiso University, Northern Illinois University, and, of course, Illinois Institute of Technology.

ITR has prepared five robots to compete this year, including some veteran robots as well as a few newer competitors. ITR will be re-entering its oldest-running robot, Roslund, who will be showing off some new wheels this year instead of the old Mecanum wheels it once proudly wore. ITR will also be entering an entirely new robot, Modulus, featuring a crab drive system, where the wheels rotate normally as well as spin on a pivot, allowing the robot to change direction at any time with no turning radius. Fenrir, ITR's two-wheeled gravity drive robot will also be making a return and will be sure to be a crowd favorite. Joining these robots will be the highly-powered Goliath and the flying quadcopter project designed by members of ITR.

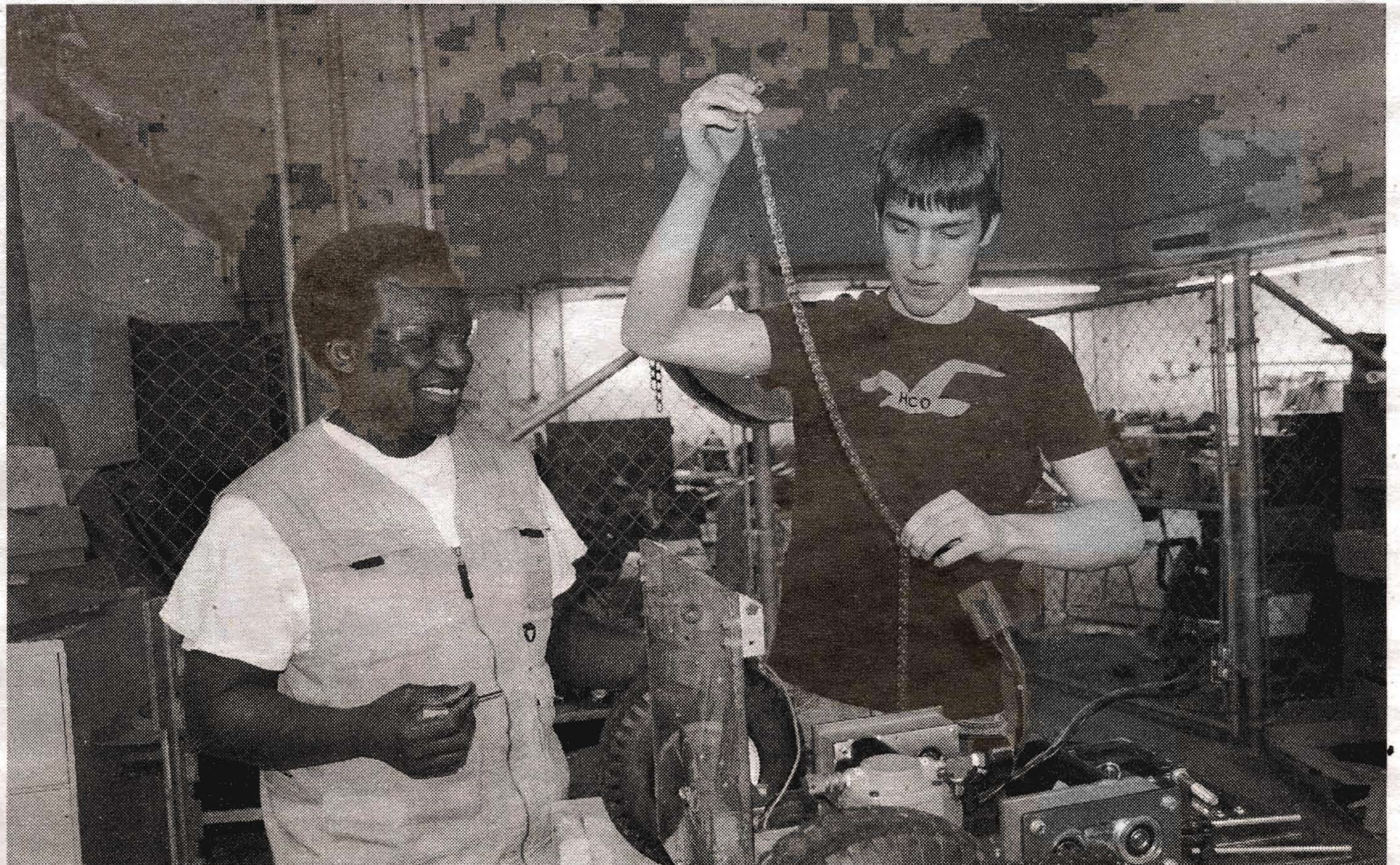
"I loved the whole experience last year," said Nash Kaminski, second-year computer engineering student and captain of the Goliath project team. "I loved getting to know the other competitors so now we can compete with them as effectively as possible. After our club's success with Pumpkin Launch this year, we're really excited to play to win."

JSDC is a robotics competition with a game challenge that varies each year where robots are designed to manipulate game pieces and score points. Each match has four robots facing off against each other for a seven-minute time period where teams compete to have the most points at the end of the match.

For this year's competition, teams have to build robots that are able to pick up and manipulate flexible disc cones that are located in various places around the playing field and place them on pegs around the competition arena. When a robot is able to place a cone on a peg, it becomes in control of the "zone" on the field surface surrounding the peg, and it receives one, three, or five points depending on the location of the zone and how difficult it is to access on the playing field. Robots can also manipulate and place soccer balls in certain locations to unlock more areas of the field in order to score more points.

No matter the outcome of the competition, ITR is proud to have prepared five robots to be competing at the intercollegiate level; they look forward to the heat of the competition, the time spent with their teammates, and the lessons to be learned.

"I'm excited to be able to compete with all of the people I spend so much time with" said Ryan Tan, second-year mechanical engineering student who is competing for the first time with ITR. "I love being able to put together some projects that really look amazing, and I'm pumped for the competition."



Photos by Kori Bowns