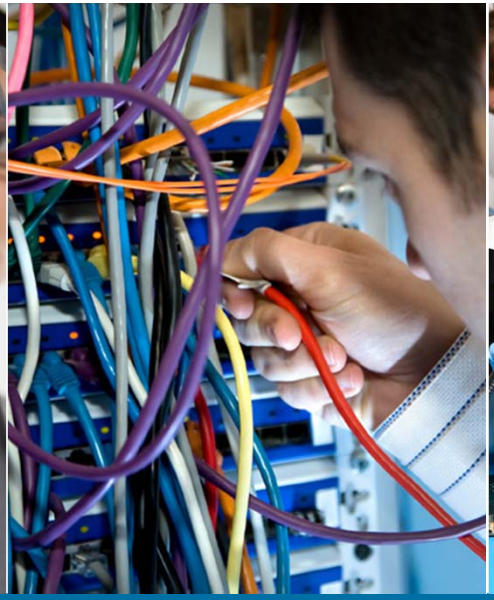
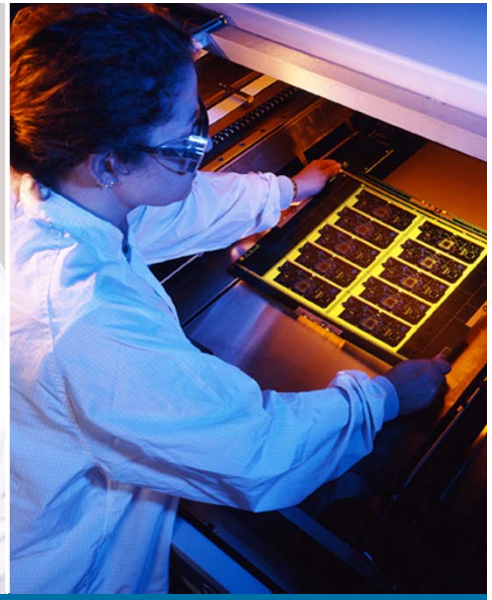
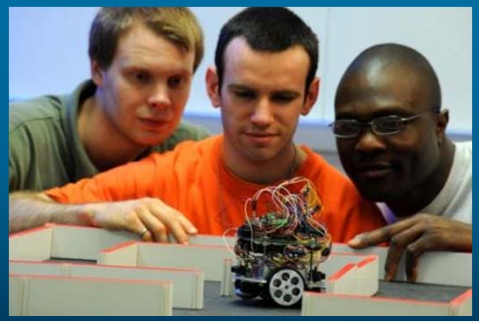




2015 IEEE Region 1 Micromouse Competition

Sheraton Burlington Hotel
Burlington, Vermont
April 11, 2015



Soon Wan (gimsoon@ieee.org)
Region 1 Membership Development Chair
2015 Candidate for IEEE Region 1 Director-Elect

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Overview

- A Micromouse is a small robot vehicle that is able to navigate its way through an unknown maze. It is autonomous, battery-operated and self-contained, encompassing computer technology, robotics and artificial intelligence. The main challenge for the Micromouse designers is to import the Micromouse with an adaptive intelligence which enables exploration of different maze configurations, and to work out the optimum route with the shortest run time from start to destination and back. In addition, the Micromouse must reliably negotiate the maze at a very high speed without crashing into the maze walls.

- The annual IEEE Region 1 Student Conference hosts the Micromouse Competition. The objective of the competition is to build a Micromouse that can negotiate a specified maze in the shortest time. This on-line webinar will introduce the design and development of the hardware and software of a Micromouse.

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Region 1 Student Conference 2015

2015 IEEE Region 1 Student Conference

2015 IEEE Region 1 Annual Student/Young Professional, and Women in Engineering (WIE) Conference

April 10-11, 2015 – University of Vermont, Burlington Vermont

- **Conference Highlights**:
  Undergraduate Student Paper Contest , Student Ethics Competition, T-Shirt Design Competition, Young Professionals Q&A Panel, Micromouse Competition, Award Ceremony and Dinner, Networking Opportunity, Meet IEEE Leaders and Industry Professionals

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2015 Region 1 Student Conference - the highlights

IEEE Region 1 Micromouse Competition

- Micromouse Competition
  - The objective of the competition is to build a robot which can negotiate a specified maze in the shortest time.
  - First Place: $800, Second Place: $500, Third Place: $200

- Eligibility:
  - The entrant must be an undergraduate student at a school in the Region at which there is an IEEE Student Branch at the time of entry at the Branch contest.
  - A Student must complete and submit an application for membership in IEEE prior to entry in the Branch Contest.

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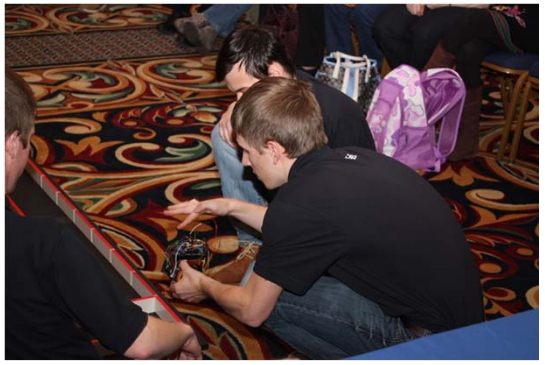
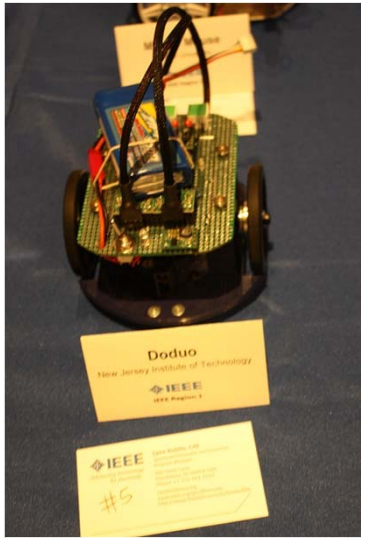
2015 Region 1 Micromouse Competition - student participants

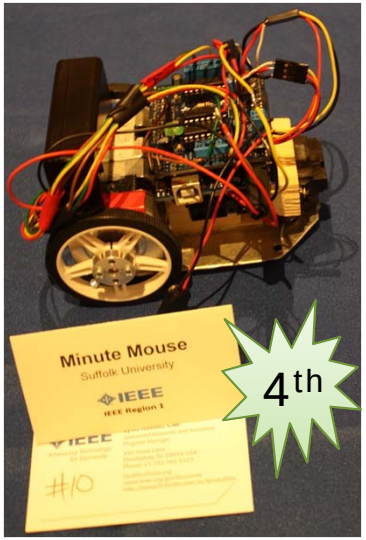
2015 Region 1 Micromouse Competition - actions

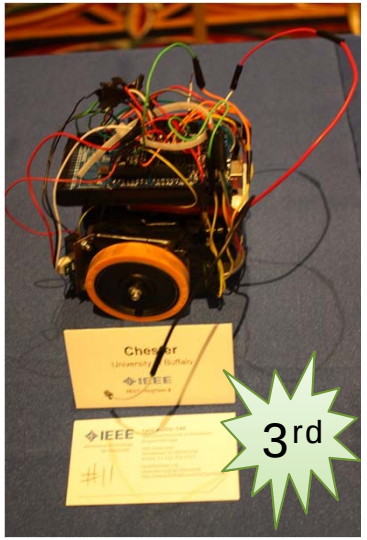
2015 Region 1 Micromouse Competition - more actions

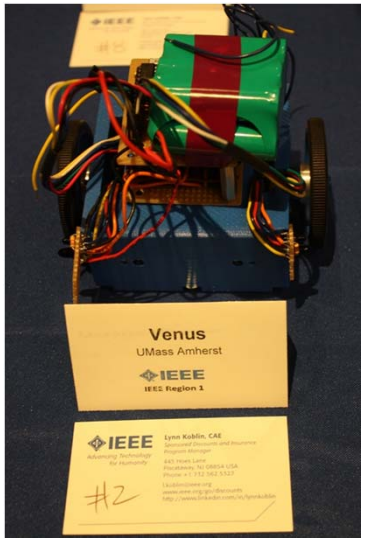


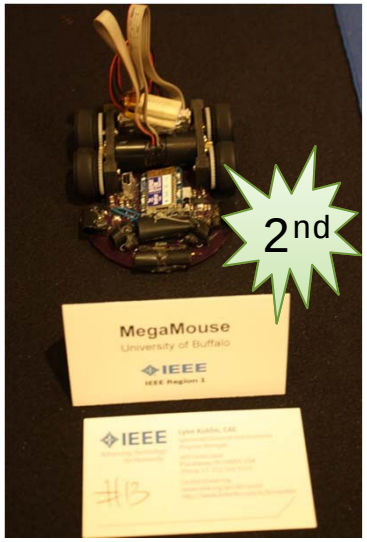
2015 Region 1 Micromouse Competition - Micromouse

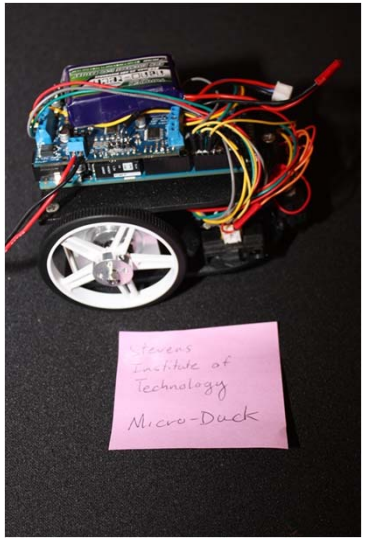


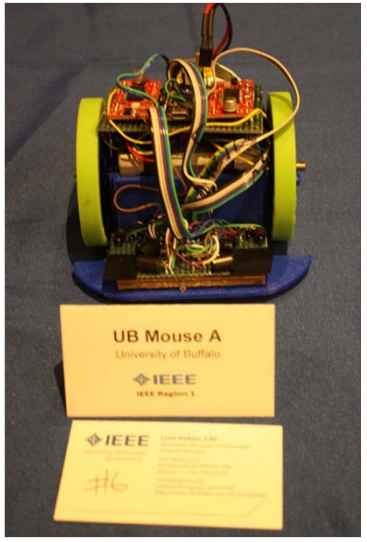










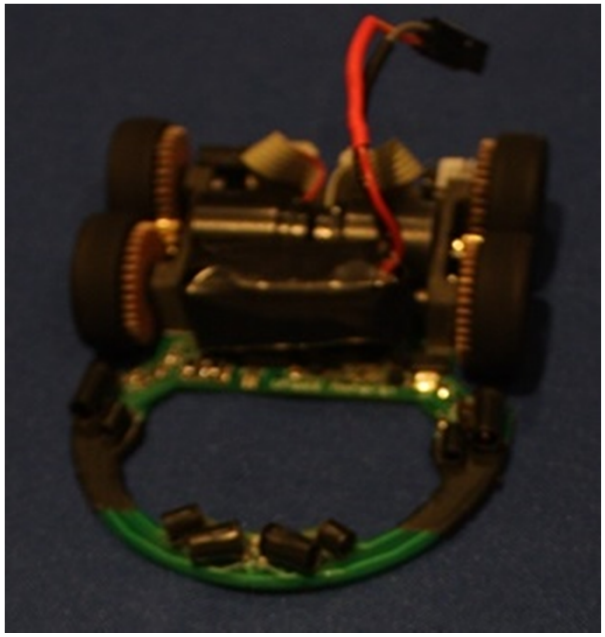


2015 Region 1 Micromouse Competition - more Micromouse

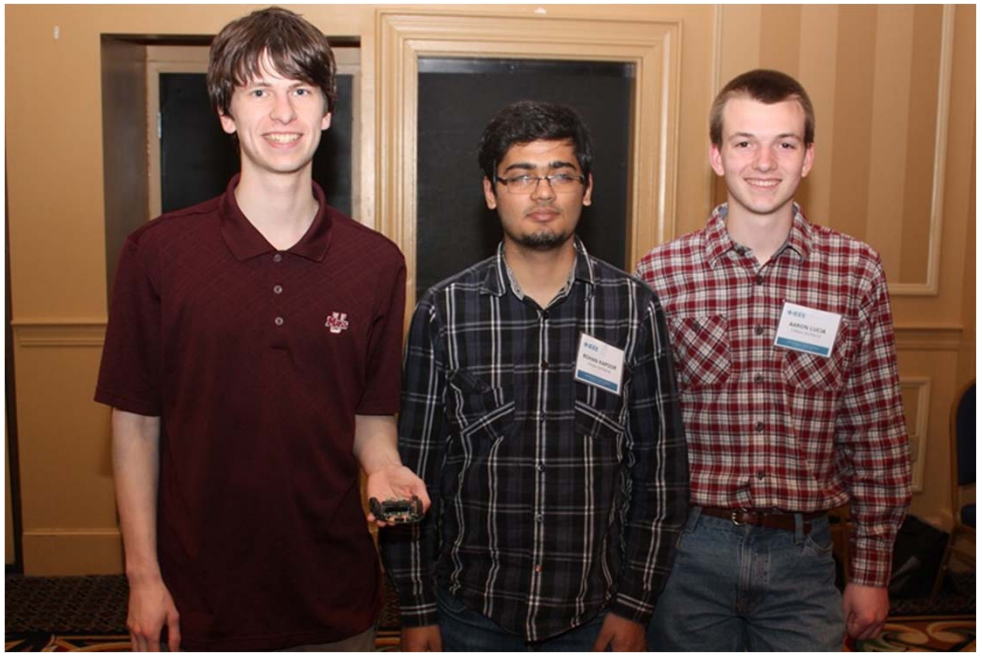
2015 Region 1 Micromouse Competition - winners

1st Place

(Run time to Goal = 14.97sec)



Mercury Micromouse



University of Massachusetts Amherst

- Justin Marple (Team Leader)
- Rohan Kapoor
- Aaron Lucia

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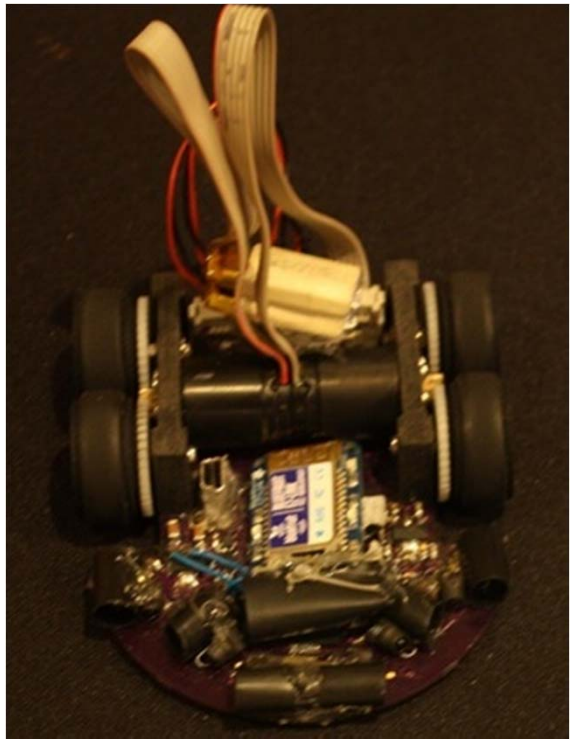
2015 Region 1 Micromouse Competition - winners

2nd Place

(Run time to Goal = 48.76sec)



MegaMouse Micromouse

University of Buffalo

- Kyle Thompson (Team Leader)
- Mack Ward
- Joe Materski
- Jimmy Mazur
- Tomasz Pietruszka

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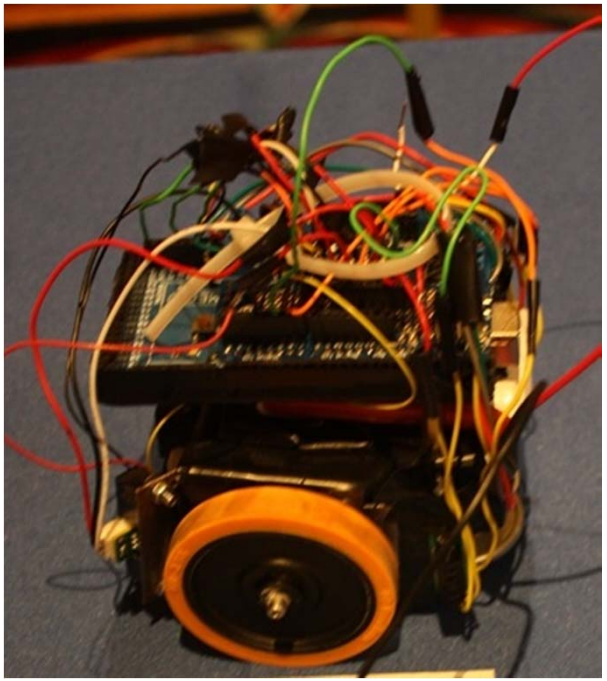
2015 Region 1 Micromouse Competition - winners

3rd Place
(1st Closest to the Goal)



Chester Micromouse

University of Buffalo

- Mike Szymkowski (Team Leader)
- Matt Spitzer
- Maxim Solomonyuk
- Nazia Hasan
- Carly Schulz
- Kevin McMahon

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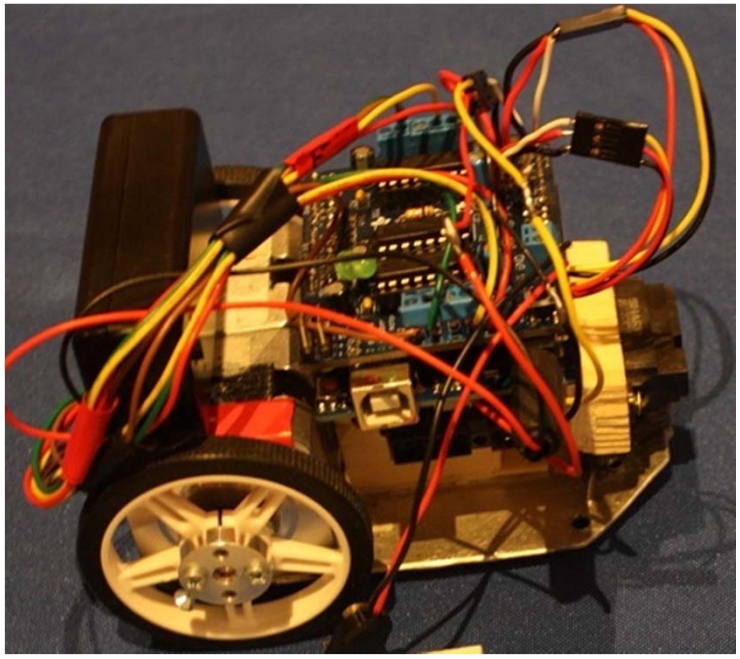
2015 Region 1 Micromouse Competition - winners

4th Place
(2nd Closest to the Goal)



Minute Micromouse

Suffolk University

- Frank Calderon (Team Leader)
- Michael Wall

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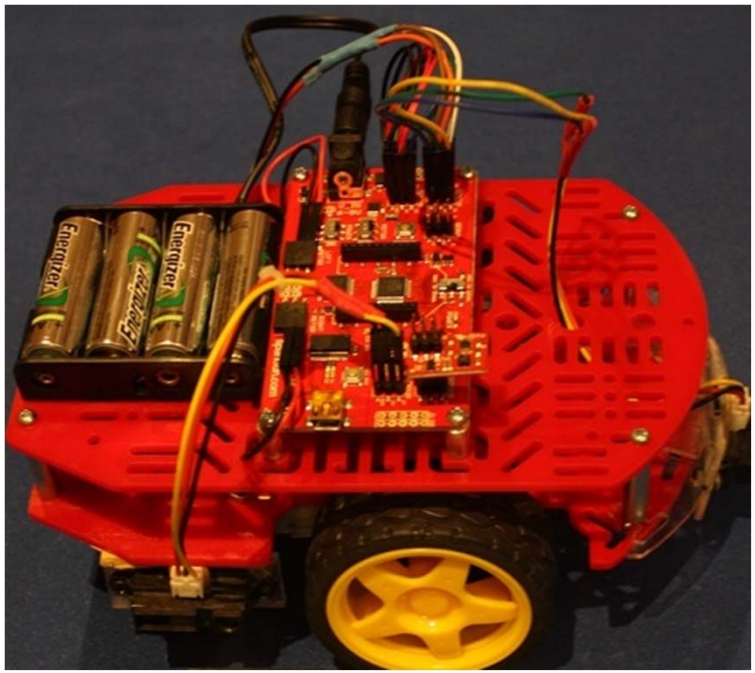
2015 Region 1 Micromouse Competition - winners

5th Place
(3rd Closest to the Goal)



Squeak Micromouse

Roger Williams University

- Ethan Daniels (Team Leader)
- Taylor Winnick, Nicole Marmo
- Nicholas Benoti, Kyle Lourens
- Kristi Perreault, Aidan Bradley
- Kelsey Cintorino

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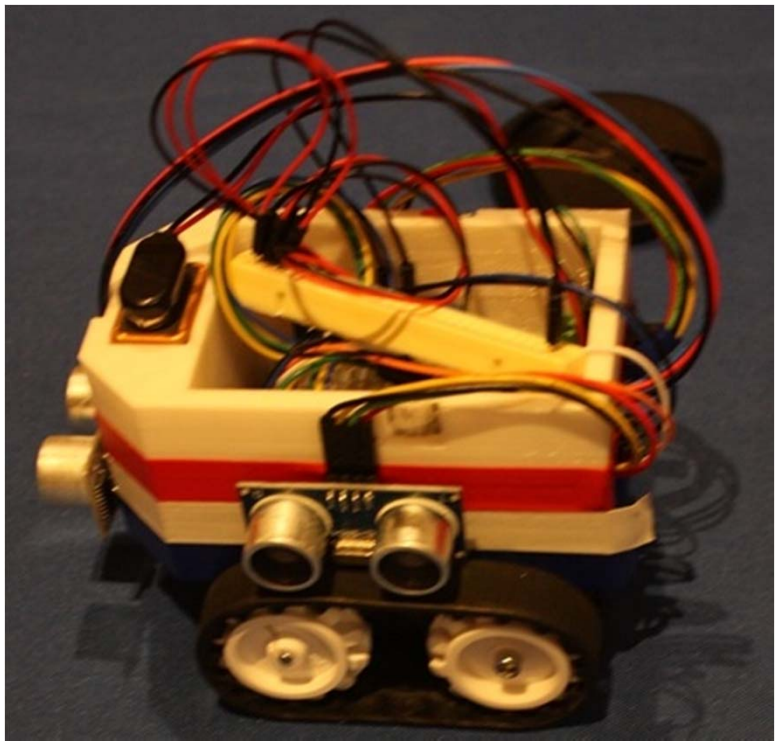
2015 Region 1 Micromouse Competition - special award

Funny Award



Grody Micromouse

Monmouth University

- James Blessing (Team Leader)
- Abdul Muhsin Al-Kandari
- Nico Flora
- Alex Kristensen
- Veronica Granite

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2015 Region 1 Micromouse Competition - the judges

Alvin Joseph, Green Mountain Section
Bala Prasanna, Region 1 Treasurer $$$
Bob Pellegrino, Region 1 Southern Area Chair
Anthony Wan, Future IEEE Member
Dave Harame, Green Mountain Section
Rob Vice, Region 1 Young Professionals Coordinator

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Thank you

Soon Wan

2015 Region 1 Student Conference Micromouse Competition Chair

gimsoon@ieee.org

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