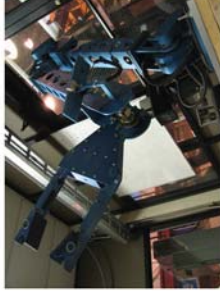


PROJECTS

Inverse Kinematic Arm

The IK arm explores control algorithms for implementing inverse kinematic control.



HexaPod

The HexaPod projects aims to create a small-scale, six-legged stable walking robot.



Downhill Derby Car

We also represent Georgia Tech in several downhill derbies. The RoboJackets downhill derby car has won second place in the Emory Dooley Derby twice, and we plan to win the title this year.



MORE INFO

Thank you, Sponsors.

We could not do this without our sponsors and we thank them for their generous support.

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If you are interested in becoming a sponsor, please contact us.



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The RoboJackets are located in the Student Competition Center, also known as the Tin Building. It's building number 48 on the GT campus map.



adjustable seat

power steering

music-activated lighting

speaker system

RoboJackets
FIRST. RoboCup. IGVC. BattleBots.



A Georgia Tech Student Organization
in the George W. Woodruff
School of Mechanical Engineering

**Georgia Institute
of Technology**

WHO ARE WE?

We're the RoboJackets.

The **RoboJackets** are a group of Georgia Tech students, faculty, and alumni with a passion for robotics. We want to increase the knowledge, understanding, and exposure of robotics. Our mission can be summed up through three words:

PROMOTION

Through presentation of the **current** and **future uses of robotics** in both **industry** and the **home**, we hope to show the **practicality** and **versatility** of robotics as well as to increase interest in robotics education and careers.

EDUCATION

Through **training** workshops, **competitive robotics**, and student-designed **experimentation**, the RoboJackets encourage the **actual application** of theory taught in the classroom by supplementing it with hands-on experience.

ADVANCEMENT

Through **development** projects and **student experimentation**, the RoboJackets hope to expand both our organizational **knowledge** base, as well as that of the students involved and the **robotics community**.

Our members come from a variety of backgrounds.

Some start with little to no experience, while others have been building robots all their life. By joining the group and designing robots, our members gain skills such as:

- MACHINING**
- WELDING**
- FABRICATION**
- CIRCUIT DESIGN**
- COMPUTER MODELING**
- SONAR AND RADAR**
- PROGRAMMING**
- MACHINE VISION**
- PROJECT MANAGEMENT**
- PRESENTATION SKILLS**



Members get hands-on experience they can't get in a classroom, and gain the experience that companies look for in a job applicant.

WHAT DO WE DO?

WE TEACH 30+ HIGH SCHOOLS

The RoboJackets serve as mentors for teams competing in the **FIRST** robotics competition.

Each year, a team must build a 120 pound robot in six weeks to compete in that year's game. We teach them engineering, programming, and teamwork.



WE PLAY ROBOT SOCCER



We compete in RoboCup, the international robotic soccer competition. The goal of RoboCup is to create a team robotic players that can beat the human World Cup soccer team by 2050.

The RoboJackets participate in the small size league, where two teams of five coffee can-sized robots go head-to-head, all controlled autonomously.

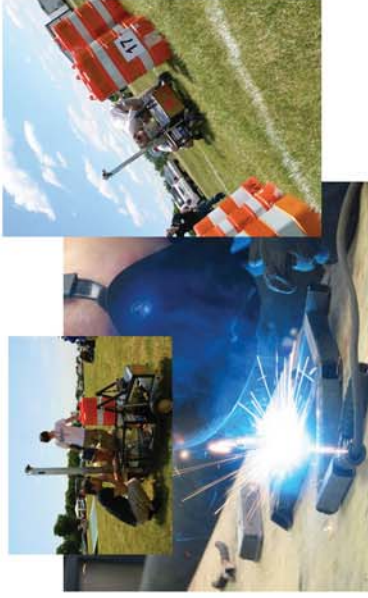


OUR ROBOTS DRIVE THEMSELVES



The Intelligent Ground Vehicle Competition sits at the cutting edge of engineering, somewhere between jetpacks and flying cars. Sponsored by DARPA, the challenge is to design, build, and program a fully autonomous, unmanned robot that can navigate an obstacle course.

The RoboJackets have been competing in this event for several years, and have consistently placed in the top ten teams for three years in a row.



...AND BREAK OTHER ROBOTS



We also build less peaceful robots. The kind that don't drive around a field, or play soccer. We also build robots whose sole purpose is to destroy other robots.

BattleBots is a combat robotics competition, where the goal is to destroy the opponent. Robots must survive axes, maces, saws, spears, hammers, and more.

