



RoboJackets

FIRST - IGVC - BATTLEBOTS - ROBOCUP



WWW.ROBOJACKETS.ORG



Overview

- Student Organization
 - Chartered in ME Dept (1999)
- Highly Multidisciplinary
- Meeting in Student Competition Center (SCC)
- Promote, Educate, Advance
 - Competitions, Outreach, Independent Projects



Activities



Competitions

- IGVC
- RoboCup
- BattleBots
- FIRST (HS)



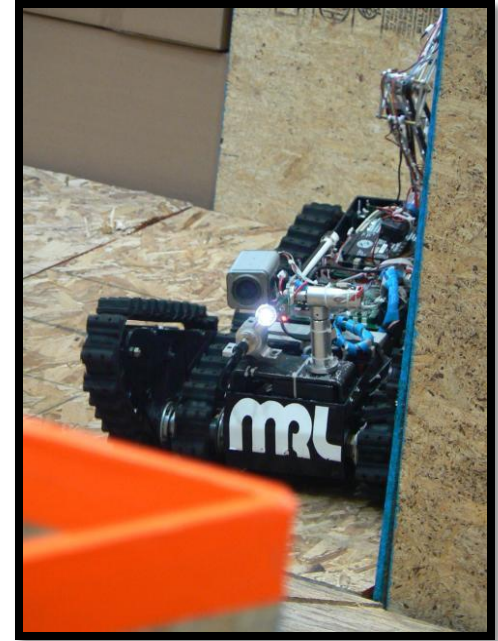
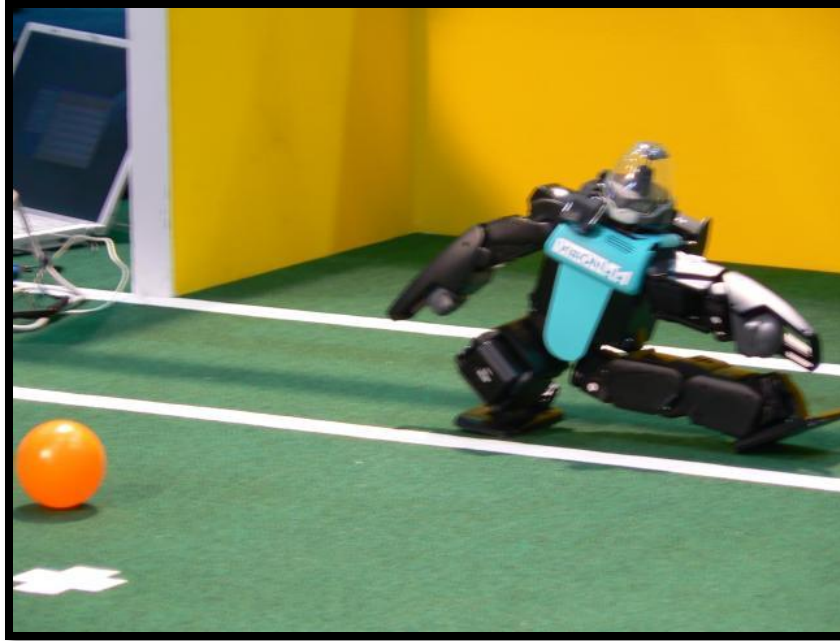
Outreach

- TE Sessions
- FIRST (HS)
- RJ
JumpStart



Independent Projects

- HexaPod
- IK Arm
- UberBoat
- Custom
Roomba
- Sidewalk
printer
- Downhill
Car



Soccer & Rescue

ROBOCUP

RoboJackets



Overview

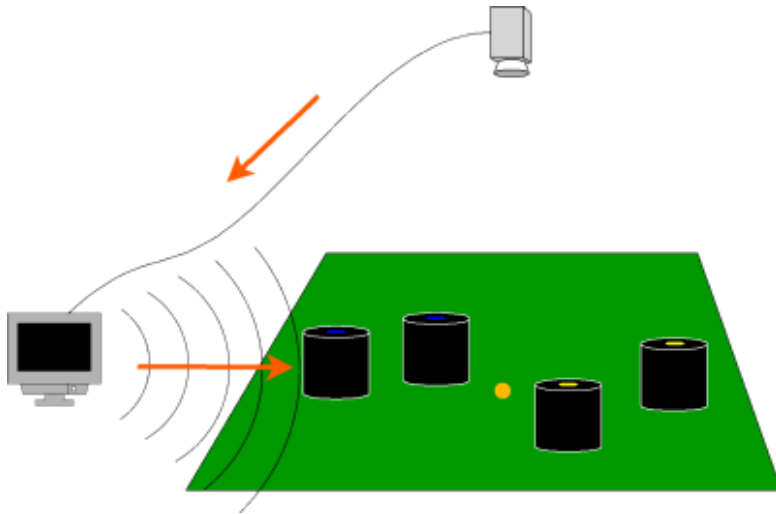


- Fully autonomous
- Coffee can sized
 - 5 Identical
- Controlled by
 - Over head cameras
- Wireless communication
- Indoor vision
 - Soccer Game

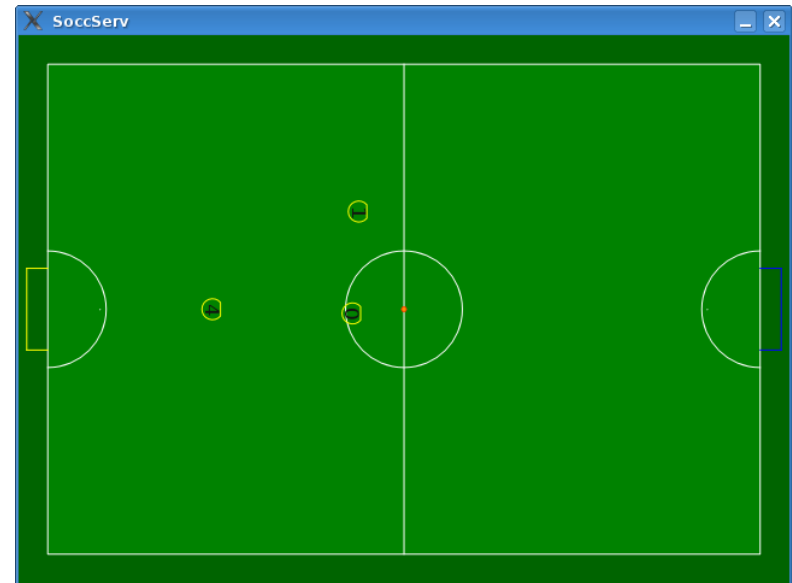




How it works



Typical system setup



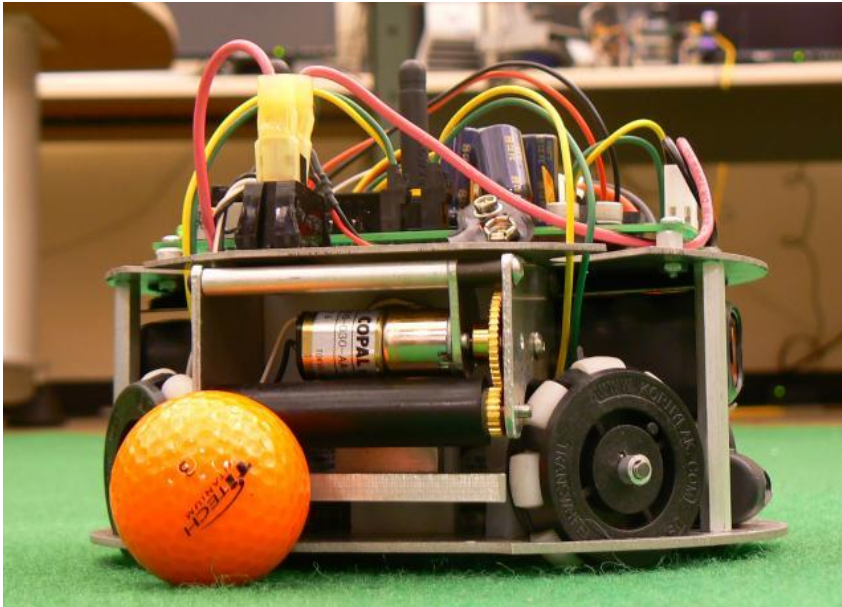
Computer drawn field



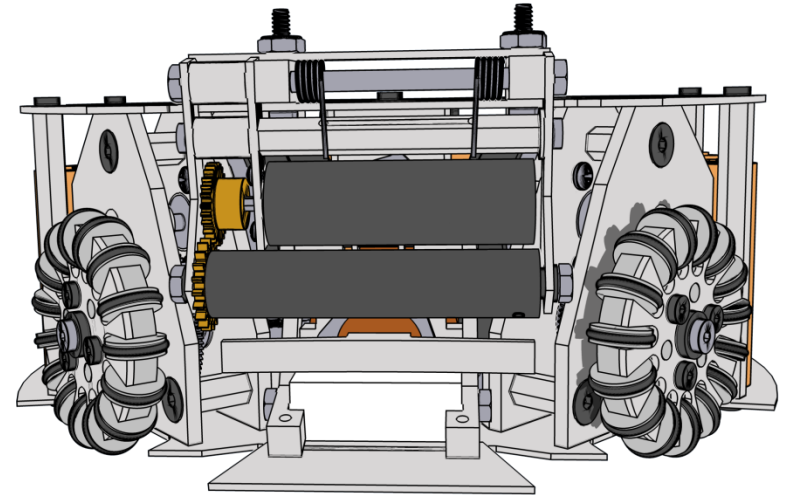
Overall Comparison



2007



2008



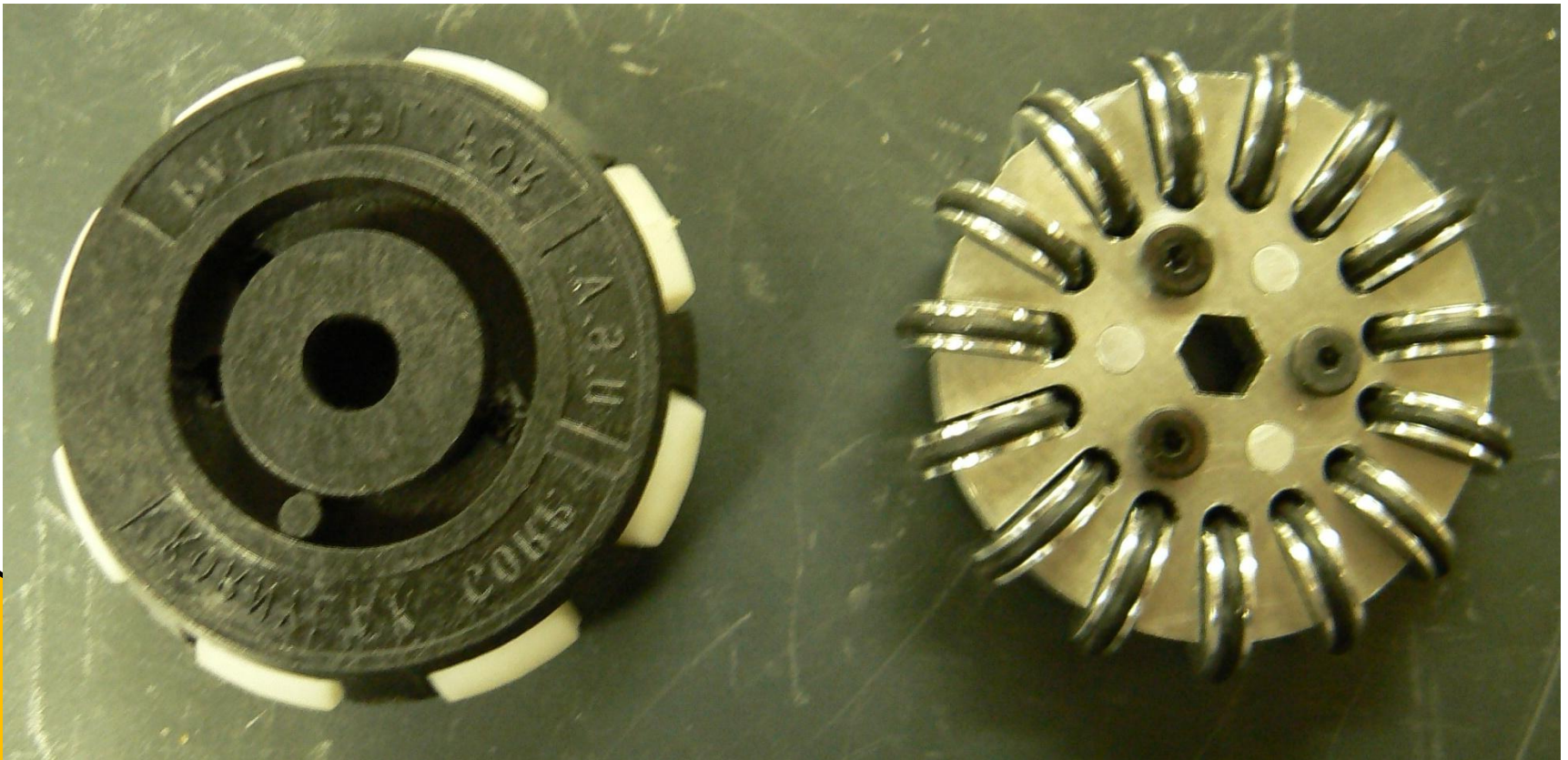


Omni Wheels



2007

2008





2007 World Event



RoboJackets



Intelligent Ground Vehicle Competition

IGVC

RoboJackets



IGVC



- Fully autonomous
- 300 lb (largest)
- Off-road
 - Ramps, Sand pits
- Controlled by
 - Rear mounted camera
 - Laser range finder
 - GPS
 - Player / Stage Network
- Outdoor vision



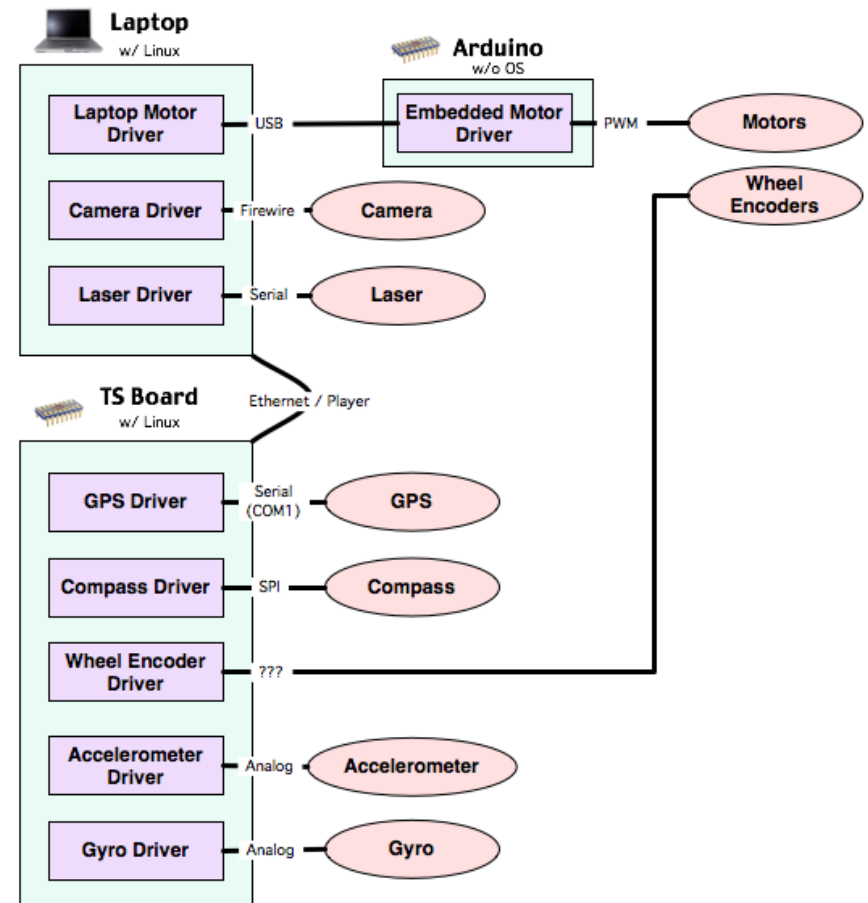
How it works



Diagram



Flow Chart

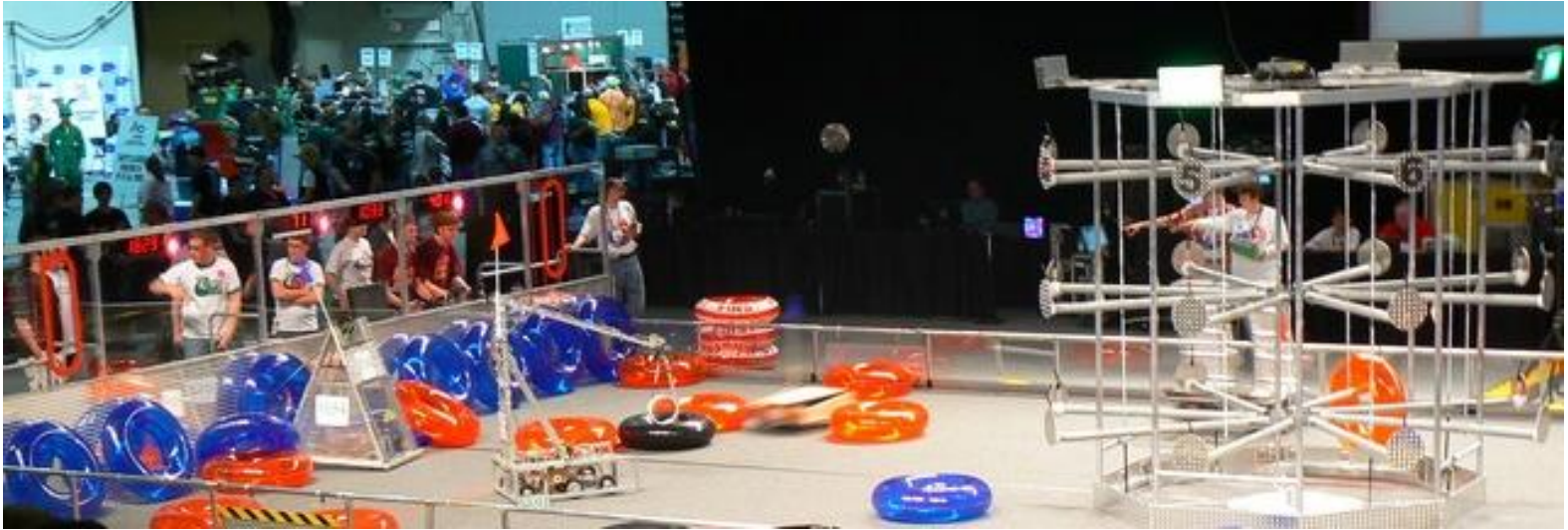




2007 Competition



RoboJackets



For Inspiration and Recognition of Science and Technology

FIRST

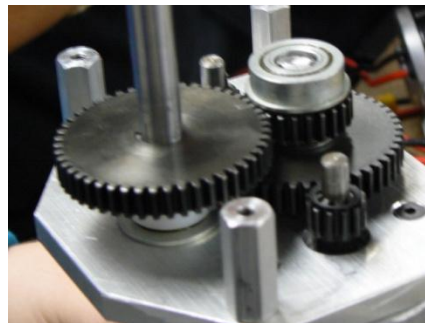
RoboJackets



FIRST



- Provide a handful of local high school teams with funding for build
- Work in SCC w/ 1 team during build season
 - Tech High (No Relation to Georgia Tech)
- Team Leaders
 - Brian
 - Roman



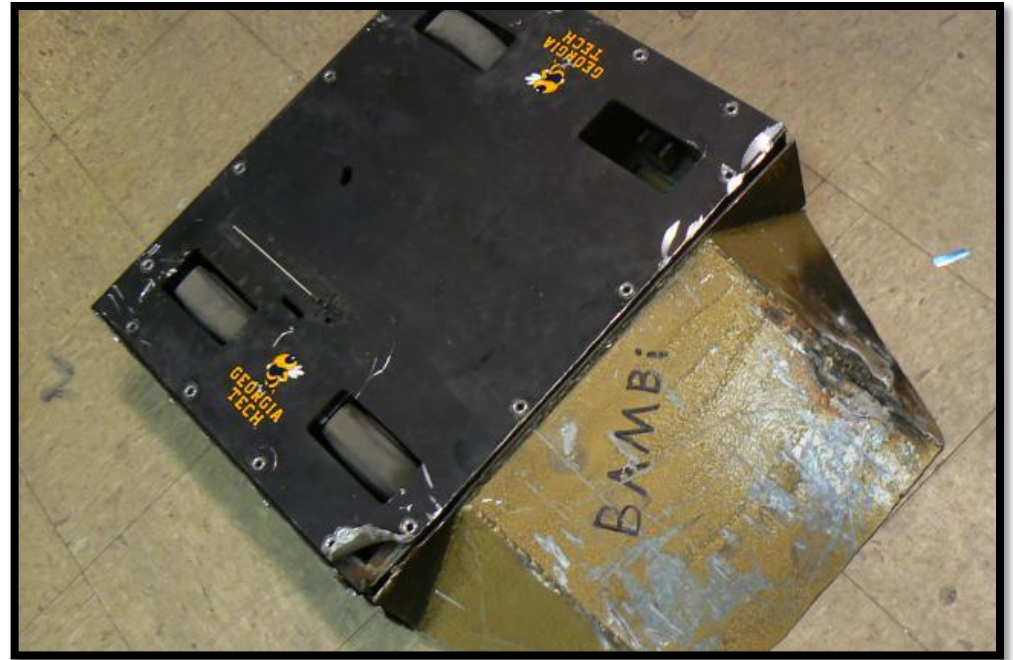
RoboJackets



BattleBots



- Remote Control
- Heavy weight class
- Engages in combat





RoboJackets

FIRST - IGVC - BATTLEBOTS - ROBOCUP



WWW.ROBOJACKETS.ORG