Robotics

Robot - Driving, wheeled
Task - Obstacle avoidance

Design Ideas - Rover-style:

![Diagram of robot design]

Unwise design factors:
- Third motor-controlled wheel
- Fixed-axle third wheel
- Smaller wheels on motors
- Larger third wheel

Testing
- Third wheel needed for stability

Test 1 - Reposition of "start"
Test 2 - Structure began collapsed; additional support needed
- Program lowered power or reverse to prevent falling over
Test 3 - Added "stop" once object approached but
- Increased distance to 24 in.

Final tests: avoid nearly all obstacles while maintaining stability
Future improvements:
- More stable axis for rotating wheel
- Construction to allow a flat viewing angle
- Flatter angle to enhance stability