

# Driving Miss Daisy

Autonomous Wheelchair

Moishe Groger

# Driving Miss Daisy

- Autonomous robot can self-navigate to pre-set locations within a house or apt such as kitchen, dining room, bathroom, front door
- Robot can also self-navigate to a GPS location
- User has override control at all time (short of collision)
- Adaptive collision detection finds a way around obstacles if user cannot
- A warning is given if uneven ground is detected, robot will attempt to stay on sidewalks
- Ability to send help or tracking messages

# How?

- Solid base with a seat, wheels and joystick
- Buttons to choose interior pre-set destinations
- 3D IR (detect floor edge), bump sensors and joystick for obstacle avoidance.
- Measure motor currents to detect stuck conditions – for example, one wheel spinning
- GPS for navigation outside
- Bluetooth or cell phone to send for help if desired or if stuck, include GPS coordinates for tracking