The Future of the Wunderbot

By: Chris Ramos
Objectives

- Research
- Collect information
- Analyze findings
- Report conclusions
Existing Features and Capabilities

- Several intricate sub-systems
  - Path Planning Algorithms (GPS capability)
  - Complex Vision Systems
  - Joint Architecture for Unmanned Systems (JAUS)
  - Image Processing and Pattern Recognition
  - Combinational Logic Based Collision Detection System
  - Short-range Proximity Detection

- LabVIEW
IGVC Modifications and Updates

- Full subsystem integration
- Mechanical changes
  - Replace castors with spherical wheels
- Possible vision system changes
- JAUS 3 implementation
Virtual Touring and Environmental Sampling

- **Virtual Touring**
  - Senior Project by President of Wunderbot club, Mike Patrick
  - [http://www.etown.edu/docs/Public/Etown%20College%20Campus%20Map.pdf](http://www.etown.edu/docs/Public/Etown%20College%20Campus%20Map.pdf)

- **Environmental Sampling**
  - Idea being entertained as possible Senior Project
Goals for Spring 2011

- Possible complete system overhaul
  - Reduce learning curve
  - Encourage new members
  - Interdisciplinary possibilities
- Body and mechanical changes
- New code
Thank you for your time

http://www2.etown.edu/wunderbot/