

Science and Technology Challenges for Robotics

Co-organizers: Bekey, Kumar, Mason
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Goals

- Discuss vision, achievements, challenges, and milestones;
- Explore possible processes for promoting US robotics research – a national network, decadal surveys, roadmapping, ...

Background

- Recent WTEC study (www.wtec.org/robotics) suggests US should increase its investment in robotics;
- EURON (European Robotics Network) has made significant strides;
- Other disciplines in the US have benefitted from self-organization.

The workshop

- Panels. 5 minute talks. No powerpoint. Discussion.
 - National networks
 - Robotics industry
 - Beyond robotics
 - Perception in Washington
 - Next steps

Outcomes

- Enthusiastic attendance.
- Very long list of volunteers. 70?
- Insightful and diverse opinions.
- We feel encouraged to pursue.
 - Approach NSF for pilot funding.
 - Enlarge the level of engagement.

A sampling ...

- Roadmapping effort might be very useful to those trying to eradicate robotics;
- Ten-year plan: back to the USSR;
- ... identifiable share of GDP ...
- Directions: generalizable robots; unstructured manipulation; autonomous automobiles; elder care;
- Accomplishments: MERS, surgical bots,
- Goal of NASA manned programs: using robots to put humans in harm's way.

Thanks!

- To organizers and sponsors of RSS;
- To our speakers: Christensen, Durrant-Whyte, Dietsch, Marsh, Tansley, Parker, Thrun, Koditschek, Trinkle, Chirikjian, Lumelsky, Xiao, Krotkov, Volpe, Cutkosky, and most especially to that one whose name I have forgotten;
- Enthusiastic discussants.