Autonomous Robots for a Human-Occupied World
and
Wearable Assistive Technology Devices

Prof. Seth Teller
MIT CSAIL / EECS
Self-driving (autonomous) passenger vehicle

Joint work with J. Leonard (CSAIL/MechE), E. Frazzoli, J. How (LIDS/Aero-Astro) et al.
Voice-commandable robotic forklift

Joint work with R. Davis (EECS), J. Glass (CSAIL), M. Cummings, E. Frazzoli, J. How, N. Roy (Aero-Astro) et al.
Voice-commandable robotic wheelchair that can learn from tours … with a voice-commandable robot arm to manipulate objects

Joint work with N. Roy (CSAIL/Aero-Astro), J. Glass (CSAIL), B. Reamer (AgeLab) et al.
Wearable device for blind people, with speech/gesture/Braille interface

Joint work with R. Miller, A. Torralba (CSAIL/EECS), J. Glass (CSAIL), N. Roy (CSAIL/Aero-Astro) et al.
Looking for UROPs to help with:

• Development of robots, wearable devices
  – Sensors, servos, netbooks, Braille devices, wifi…

• Algorithms and human-machine interfaces
  – Perception, real-time mobile manipulation planning and control, speech recognition
  – Coding in Matlab, C/C++, Java, Python

• User testing and evaluation
  – Wizard-of-Oz interfaces, COUHES-approved experiments, prototype trials with real subjects
How to apply for a summer UROP:

- Email `teller@csail.mit.edu`
- Put UROP, project keywords in subject line
- Link to (don’t attach) your resume as a PDF
- Briefly state your relevant background
- Briefly describe your interest in project(s)
- Suggest a list of meeting times during the weeks of April 11th, April 25th, and May 2nd

- These slides posted at: http://people.csail.mit.edu/teller/CSAIL