

CoBot(s), Manuela Veloso

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www.cs.cmu.edu/~coral/cobot



History

- CoBot-1, CoBot-2, CoBot-3, CoBot-4, built by Mike Licitra, functional in CORAL lab since early 2009
- 2008 – 2014 – Joydeep Biswas researches on localization and navigation – PhD December 2014
- 2008 – 2012 – Stephanie Rosenthal researches on CoBot's human-robot interaction – PhD May 2012
- 2009 – 2014 – Brian Coltin researches on multi-robot task scheduling – PhD May 2014
- November 18, 2014 – The CoBots reach 1,000km of autonomous navigation and > 4,500 tasks.

Research: AI and Robotics

- Task planning, execution, and learning
- Autonomous robot localization
- Symbiotic autonomy: robots proactively ask for help to overcome their limitations
- Human-robot interaction to service, and learn from humans, the web, and other robots
- Dynamic multi-robot task planning for multiple robots and multiple users
- Human-robot interaction
- Self autonomous exploration
- Robot safe execution

