



UPDATE

by Tom Atwood

ROBOTICS ROADMAP

Here at Robot we love hobby robotics, robot competitions in all tiers of schools and the exciting and rapidly expanding technical developments emerging across the globe as robots proliferate. But there is another aspect we should keep in mind as informed citizens—are we as a society investing sufficiently in robotics industries that can help build our economy? An interesting recent report on this is “A Roadmap for US Robotics—From Internet to Robotics,” part of a Computing Community Consortium (CCC) study on Robotics. It was authored by a broad group of robotics leaders from major universities and was sponsored by the National Science Foundation. The free 94 page report can be downloaded from www.cra.org (search for “Robotics Roadmap”).

We have huge national opportunities in robotics but the evidence suggests that we are reaching a tipping point in terms of basic investment. The Roadmap divides up the various robotics markets and explains how building those markets can be an economic enabler for the country. If you are interested in the larger context of robotics, we recommend that you peruse the Roadmap.

Spokesperson Henrik Christensen presented the Roadmap overview at a May 22, 2009 briefing on Capitol Hill. Christensen is KUKA Chair of Robotics at Georgia Tech and has a deep knowledge of worldwide national goals and progress in robotics research and funding. His presentation is available on YouTube—search for “robotics roadmap part1” and

you can watch six clips in sequence posted on Robin Shoop’s YouTube channel. There is also a “highlights” overview tape at: www.youtube.com/watch?v=0igL19b4dso.



Henrik I. Christensen, KUKA Chair at Georgia Tech, stands next to a robot that can lower product distribution costs.

HIGHLIGHTS

Our cover story on the Jaemi Hubo Research Humanoid, by Richard Silverman is a must read if you are interested in the latest humanoid technology brewing on the university level, see page 36. Have you played with a Solarbotics Turbot and wondered how it manages to amble around and untangle itself from chair and table legs? Jim Phelan has the answers—see BEAM Robot Neurosurgery, page 24. If you are a programmer at heart and are curious about programming an affordable developmental research mobile platform with huge expandability, don’t miss Clint Rutkas’ Robotics Connection Stinger, page 68. Entry level programmers will be intrigued by Dick and Rick Swan’s article, How to Design a VEX Maze Solving Robot, page 64.

Many of us have speculated on what it will be like living with multiple robots in our own homes—Hannah McFarlane lives with 10 robot dogs and describes the experience in Me, Myself and Aibo, page 44. Have you thought about inventing a Chess robot that moves the pieces for you? Steve Norris is back with Chess Bot, page 40, in part one of a tour de force for the Chess-minded hobby roboticist. For the kids, check out the Owi Edge Robotic Arm, now with USB.

Steve Euin Cobb has produced over 100 podcast interviews on his award-winning and engaging show, The Future and You, at www.thefutureandyou.com. A tagline on his home page says it all: “Ideas and opinion about the Future based on verifiable facts of today.” If you are interested in hearing a discussion with this editor (me) on robotics in general, please check out his June 10, 17 and 24 episodes. This is your magazine—email suggestions and comments to toma@botmag.com.

Tom Atwood
Editor-in-Chief
Toma@botmag.com