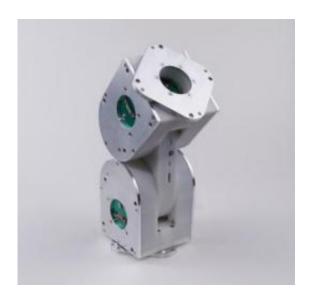


iMobot modular robot technology licensed

July 12 2011



This is an iMobot unit in 'camera platform' mode. Credit: Barobo Inc.

The University of California, Davis has signed an exclusive license agreement with Barobo, Inc. of West Sacramento, Calif., to commercialize the modular robot technology called "iMobot" – an Intelligent Modular Robot for applications in research, education, industry, search and rescue, military operation, and law enforcement. The license agreement covers the design of iMobot, giving it unique mobility developed by the Integration Engineering Laboratory at UC Davis.

Commercial robots are usually built for specific applications. Modular robots are different kinds of robots. Similar to Lego, iMobot is designed



as a building block. However, unlike Lego, a single iMobot module is a fully functional <u>robot</u> with four controllable degrees of freedom. iMobot can roll, crawl, and creep.iMobot in camera platform mode

"UC Davis is proud of its leadership in engineering inventions such as this modular <u>robot technology</u>. We are very pleased to have partnered with the company founded by two inventors to take this technology to market to provide innovative robotic platform for various applications," said David McGee, executive director of UC Davis InnovationAccess, which manages intellectual property and licensing issues on behalf of the university.

"Although modular robot can move on its own, the greatest advantage of modular systems is their high reconfigurability. Multiple identical modules can be assembled manually or self-assembled to form different configurations for different tasks. The potential of intelligent modular robot is enormous, " said Harry H. Cheng, Professor of Mechanical and Aerospace Engineering at UC Davis and Director of the Integration Engineering Laboratory.

"Robots currently on the market are not flexible enough to be used for a wide range of applications, which is where this new modular robot technology makes things possible," said Graham Ryland, President of Barobo, Inc.

A standardized robot platform for teaching and research has tremendous potential to reduce the time to prototype robotic systems. A great deal of time and energy are spent working on the mechanical and electrical robot infrastructure instead of focusing on cutting edge research.

Ryland and Cheng developed the iMobot technology while Ryland was studying for his master's degree in mechanical engineering and conducting research in Cheng's Integration Engineering Laboratory at



UC Davis. Cheng and Ryland founded Barobo, Inc. to commercialize the iMobot technology they developed while Ryland was studying for his master's degree in mechanical engineering and conducting research in Cheng's Integration Engineering Laboratory. Barobo Inc. recently received a National Science Foundation grant to scale up the iMobot robot platform for use in research and teaching at colleges and universities. Barobo Inc. is currently selling the iMobot for colleges and universities to use in a classroom/lab environment.

Provided by University of California - Davis

Citation: iMobot modular robot technology licensed (2011, July 12) retrieved 25 April 2024 from https://phys.org/news/2011-07-imobot-modular-robot-technology.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.