

Center of Computer Labs - מרכז מעבדות מחשוב

1. ערכת לימודים HAMSTER אשר מלווה את הקורס רכב אוטונומי



[HAMSTER - רכב אוטונומי](#) קטן וחכם של חברת [CogniTeam](#).

חומרת

Item	Robotic Kit Name	Kit Q-ty	Link
Hardware			
1	HAMSTER Robot Ver.4 Upd.	2	Hamster_Tech_Spec.pdf
2	HAMSTER Robot Ver.6	-	https://www.hamster-robot.com/

1.1. תוכנה

Item	SW Name	Q-ty	Link
Software			
1	Install Ubuntu 16.04 LTS	Free	https://tutorials.ubuntu.com/tutorial/tutorial-install-ubuntu-desktop-1604#0
2	Ubuntu install of ROS Indigo	Free	http://wiki.ros.org/indigo/Installation/Ubuntu
3	roscore	Free	http://wiki.ros.org/roscore
4	Hamster Gazebo simulator	Free	http://gazebosim.org/
5	cogniteam-ros-pkg	Free	http://wiki.ros.org/cogniteam-ros-pkg

הערה:

- **ROS** (Robot Operating System) provides libraries and tools to help software developers create robot applications. It provides hardware abstraction, device drivers, libraries, visualizes, message-passing, package management, and more. ROS is licensed under an open source, Berkeley Software Distribution (BSD) license.
- **Gazebo** provides implementation the Hamster's 3D STL model and control. Gazebo is able to simulate 10 Robots on an i7 Xeon 3.5 Ghz CPU with 16G RAM and at least 3G Nvidia card, or 2 robots on an i7 laptop with 2G Nvidia card and 8G RAM.

- [HamsterDeveloperManual-REV4_v1.pdf](#)
- [Hamster Micro AUGV.pdf](#)
- [Hamster Micro AUGV - SDK.pdf](#)

1.3. קישורים נוספים

- Cogniteam Company: <http://www.cogniteam.com/>
- ROS Tutorials: <http://wiki.ros.org/ROS/Tutorials>
- Gazebo Tutorial: <http://gazebosim.org/tutorials>