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Future of robotics is happening now

by Nikola Miloševi? - Saturday, April 13, 2013

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We can say that robots are one of the greatest unfulfilled predictions and promises of science fiction. Question would be for how long? Today there are many projects that are creating this futuristic world of science fiction where we have robot helpers and even autonomous intelligent robots. Robots now are not the luxury of rich robotics institutes or rich people. Today almost anyone for about \$300 could have it's own programmable robot. If you are great programmer then you may even have intelligent robot. Lets take a look on few examples.

Little about research

Groundbreakers first. So where is the research in this field. Many researchers are tring to create intelligent robots with applications of computer vision, machine learning, language processing etc. One of the great example is what is done in Stanford AI lab (Artificial Intelligence). A lot of what they did can be seen from this video where Andrew Ng describes what he was working on with his team in the last 10 years. Interesting thing for me was that autonomous robot helicopter firstly learned manuver that is hardest to perform for humans. Also there is robot that was exploring autonomously around the campus looking for cups.

YouTube Video

Lego mindstorms

One of my favorite toy companies from childhood might remain favorite event in this age. They created robot made from LEGO bricks, with ARM computer, memory and many different sensors. So you may create a robot that would look as you wish and program it to do whatever you want. Mindstorms have 6 different sensors (touch, Light, Sound, Ultrasonic, Compass, Color), so it really have sence about world. It comes with simple programming tool for PC and MAC computers, but it could be also programmed with almost any programming IDE for robotics like Microsoft Robotics, LabView, RobotC, even Lua or Java. Take a look to comercials and video of robot that solves Rubic's cube:

YouTube Video

YouTube Video

Currently they are in third generation. Could be bought for about \$360, but unfortunatly in Serbia they are more expensive, and third generation could not be bought yet. Hopefully soon, they will arrive, and for some normal price, cause I really like them :).

Romoto's Romo

Romo is very interesting concept. Romoto is building robot that is powered using iPhone. Romo is part of hardware (wheels of robot) and iOS applications that uses iPhone resources (camera, CPU, GPU, memory) to create robot. Romoto is anounced that they are working also on Android version of Romo, and that they will also have female version of Romo. For more information watch this video about Romo:

YouTube Video

Would you like to have your robot?

I defenetly would like. Since I also like to program and play with it, my best fit is Lego Mindstorms. Which one is yours? Do you know about other personal or cheep and usable research robots? Please answer this questions in comment.

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