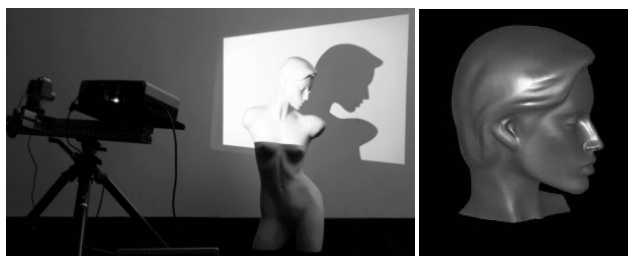


In the Spotlight

■ The three-dimensional robot

Scientists from the Institute of Micromechanics and Photonics of the Warsaw University of Technology developed a complex system of scanning three-dimensional object 3DMADAMC (3D Measurement with Algorithms of Directional Merging And Conversion). The solution includes device, as well as software controlling and data converting. General-purpose, modular construction of the system enables optional configuration.



Due to that one can obtain different measurement values, closeness and measurement times adapted to the particular object. The measurement is based on the optical methods, which make possible synchronous canvassing of the object's preferred orientation. Formulated system can be used in technology, medicine or for making archives and documentation of the works of art.

Source: <http://ogx.mchtr.pw.edu.pl>
<http://optographs.mchtr.pw.edu.pl>

■ A robot which can lift a man

Prof. Yasuo Kuniyoshi from Tokyo University has constructed a robot equipped with an innovative system of control, that enables it lifting heavy objects.



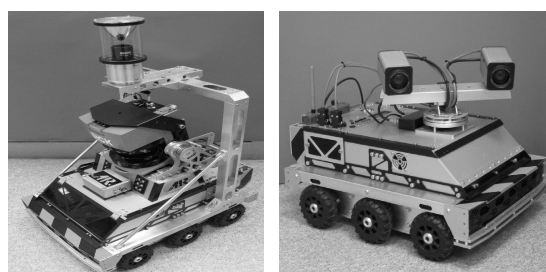
An advanced sensors system of that robot is composed from over 1800 touch sensors. For the sake of safety the robot is provided with smaller and weak engines. However, thanks to intelligent control and many sensors, 155-cm-

high robot is able to lift easily, for example, 30-kg weight package from a table or 66-kg from the bed.

Source: <http://www.robonet.pl>

■ Polish mobile robots

► Electron

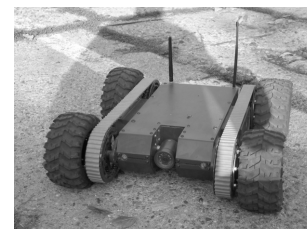


A laboratory mobile robot Electron is been constructed at the Warsaw University of Technology, as a common project of two Institutes: Automation & Robotics, and Automation and Applied Informatics. Four constructed prototypes can perform team tasks. The robots are autonomous units; they all have independent control systems and communication modules.

Modular construction enables fast equipment renewal. One of the modules is laser 3D scanner's unit and a camera for making three-dimensional maps of environment.

Source: <http://iair.mchtr.pw.edu.pl>

► ScoutROBOT



Newest Institute's project represents a new approach to designing mobile counterterrorism robots. SCOUT robot is a small-dimensional, lightweight (16 kg), fast (approx. 10 km/h) and agile pyrotechnical robot. It can be carried in an army rucksack. Scout is able to perform remote inspection in dangerous or hostile terrain, in particular on limited space like clearance beneath the vehicle chassis or the space under bus seats.

More information on www.antiterrorism.com