



EMYS EXPRESSIVE ROBOT HEAD

Ideas on utilisation

EMYS (EMotive headY System) is an expressive robotic head. It consists of three independent discs, the top and bottom of which are movable. The robot's eyes, along with the vision system, are located in the middle disc. Thanks to its unique shape, the head is always perceived with great affection, and the emotions expressed by it are easily recognised. The modularity and flexibility of the robot's control system allow for easy development of its abilities and adaptation to new applications. It already has a set of competences allowing for interaction with people, multi-channel perception of the surroundings, as well as downloading a lot of information from the Internet.

Potential adopters of technology

The design features make it perfectly adapted for tasks requiring social skills from the robot.

Advantages of technology

EMYS is an expressive head of a social robot with a unique shape that gains affection and interest of people interacting with it. The main advantages of the robot:

- Ability for multi-channel perception of the surroundings, conducting interaction with people, expressing emotions, performing simple service activities, acting as an assistant;
- Extended set of robot competences - among others audio and video processing, indoor navigation, use of the Internet resources;
- Flexibility and openness of EMYS software enables easy adaptation of the robot to the specific requirements of potential recipients;
- The expressiveness of the robot is easy to interpret, positive reactions to its appearance and the confirmed lack of the "uncanny valley" effect;
- Competitive production costs.

Market and context of technology

The scope of selected potential applications:

- Research centres as a flexible laboratory platform for research in the field of social robotics and other areas in which the social robot can be used, e.g. medicine, didactics or marketing;
- Innovative educational centres - as teaching aid in learning foreign languages, elementary education or programming;
- Modern medical and therapeutic centres - as a cognitive function trainer, carer, companion for the elderly;
- Marketing companies - a robot as a futuristic hostess, presenter;
- Public opinion research centres - as an interviewer.

Preconditions in adopting enterprises

Not expensive investment (for an established producer).