Robots and digital humans

Over time, robots keep taking on more sophisticated tasks. One of the most challenging ones is improving the interaction with humans. visage|SDK enables robots to detect human faces, track their eyes and gaze, monitor emotions, recognize people, and more. This is fundamental for improving robot control, personalizing interactions, improving security, and more.

Some of the applications include:

- **Retail**: Welcoming and assisting customers, attracting their attention and providing personalized product recommendations.
- **Healthcare**: Reducing stress, anxiety and loneliness in patients, monitoring and guiding their progress, and educating them about disease prevention and care.
- **Hospitality**: Improving reception service, conducting interactive surveys, welcoming visitors, etc.
- **Entertainment**: Toys and home robots, educational entertainment, tutoring, etc.

Any robot that will be in direct contact with people should be designed for natural, intuitive interaction. User experience is one of the very reasons why visage|SDK has always been the first choice for our robotics clients. Since it's extremely lightweight, it runs smoothly and quickly, without overloading the system. For users, it means that the robot is able to provide timely responses, making sure the conversation flows smoothly.

The robot's performance should also be consistently effective. It has been proven that witnessing a robot error (even if it happens only once) permanently lowers people's trust in the robot and its reliability. Besides losing confidence in the robot, frequent errors can lead to frustration and a loss of interest in any further interactions. Using proven technology helps bring the probability of errors to a minimum.

Finally, it's important to keep the interaction flowing in real time, without any significant interruptions. However, if the machine depends on an internet connection, its loss directly affects that interaction. That is why visage|SDK works both online and offline, keeping the machine's services available at any time.

To sum up, software that is lightweight, efficient and customizable can make a huge difference when it comes to user experience and help the robot achieve a human-robot interaction that feels as natural as possible. If you'd like to try out our technology, get in touch and request an evaluation license.

Case studies:

- *Engineered Arts: Social robots that are impossible to ignore*
- *Digital Domain: Creating the world's most realistic autonomous digital human*

Recommended reads:

- *Robots with emotional intelligence can improve human-robot interaction*

Visage Technologies consulting and custom development services are available to adapt the technology in terms of precision, performance and any other requirements in order to meet the needs of specific applications.