

Special Issue

Collaborative Robotics: Prospects, Challenges and Applications

Message from the Guest Editors

Cobots, also known as collaborative robots, are designed to collaborate with humans in a shared workspace. There are numerous potential applications for collaborative robotics in industries such as manufacturing, healthcare, and logistics. Nevertheless, collaborative robotics presents several challenges. Among these are ensuring safety, integrating with existing systems, and preserving reliability. In addition, workers must be trained to effectively collaborate with robots, and ethical and social implications such as job displacement, as well as new work organization and the need for new skills, must be addressed. The potential applications of collaborative robotics are vast despite these challenges. In the manufacturing industry, for instance, collaborative robots can perform dangerous or repetitive tasks. In the healthcare industry, collaborative robots can aid medical professionals with patient care and physical therapy. Overall, the application of collaborative robotics is a dynamic and rapidly developing field with numerous growth and innovation opportunities. It is likely that collaborative robotics will play a greater role in a variety of industries.

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