



## **New Trends in Industrial Robots**

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### **Message from the Guest Editors**

Industrial robots are rapidly evolving to meet the needs of industry. We are now seeing the use of industrial robots in continuous path control applications, such as metal (or other types of materials) cutting. Other applications involving continuous path control (instead of point-to-point control) are deburring, continuous welding, precision painting, and so on. The complexity of these applications requires the development of digital twins for the robotic processing system.

We are also seeing the increasing use of collaborative robots (cobots) designed to work with human operators. Cobots are becoming more versatile due to breakthroughs in sensors, vision, and grippers. This allows them to adapt to dynamic workplaces and tackle a larger set of assignments.

Another direction of development is the integration of AI and machine learning techniques into industrial robots to give them ability to learn, make decisions, and even program themselves.





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