

Insights from the 2023 Manufacturing Robotics Report.

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2020 AUTONOMOUS VEHICLE TECHNOLOGY REPORT

The guide to understanding
the current state of the art
in hardware & software for
self-driving vehicles.



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Different Approaches by Tesla, Volvo-Uber, and Waymo:

Tesla Model S, Volvo-Uber XC90, Waymo Chrysler Pacifica images adapted from Tesla, Volvo, Waymo, by Wevolver.

Companies take different approaches to the set of sensors used for autonomy, and where they are placed around the vehicle.

Tesla's sensors contain heating to counter frost and fog. Volvo's cameras come equipped with a water-jet washing system for cleaning their nozzles, and the cone that contains the cameras on Waymo's Chrysler has water jets and wipers for cleaning.

Volvo provides a base vehicle with pre-wiring and harnessing for Uber to directly plug in its own self-driving hardware, which includes the rig with LIDAR and cameras on top of the vehicle.



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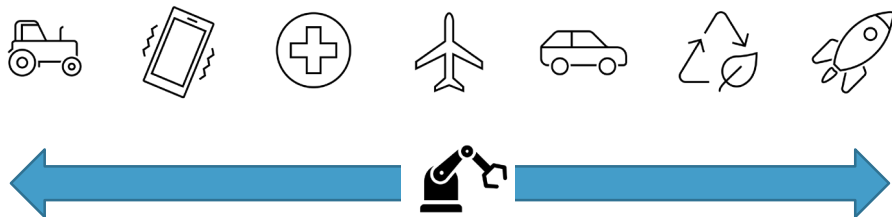
2023 Manufacturing Robotics Report

An engineer's guide to understanding the state of the art in hardware, materials, and the future of robotics manufacturing.





Why Robotics?





Myth busting



Robotics is coming...



They're too expensive...

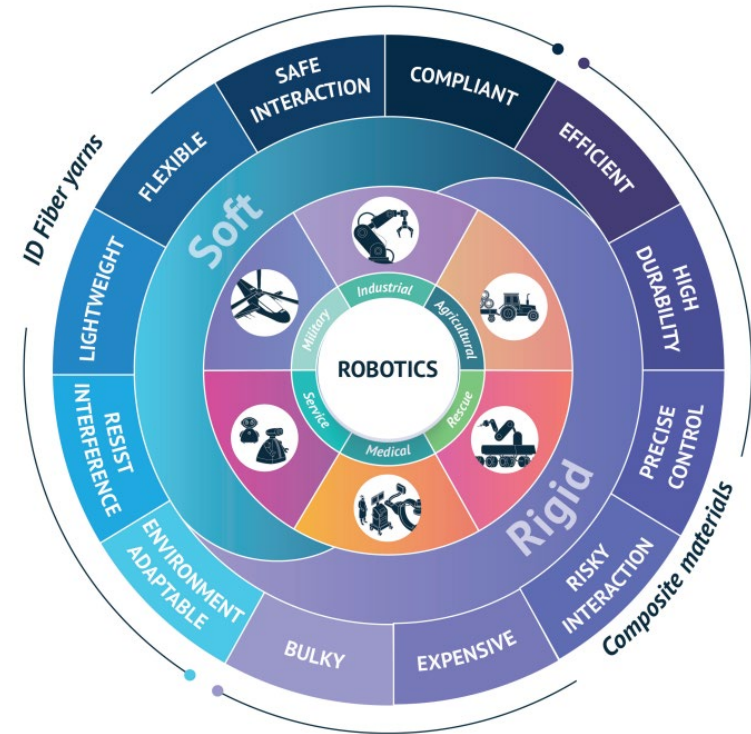


They'll take our jobs...



Materials

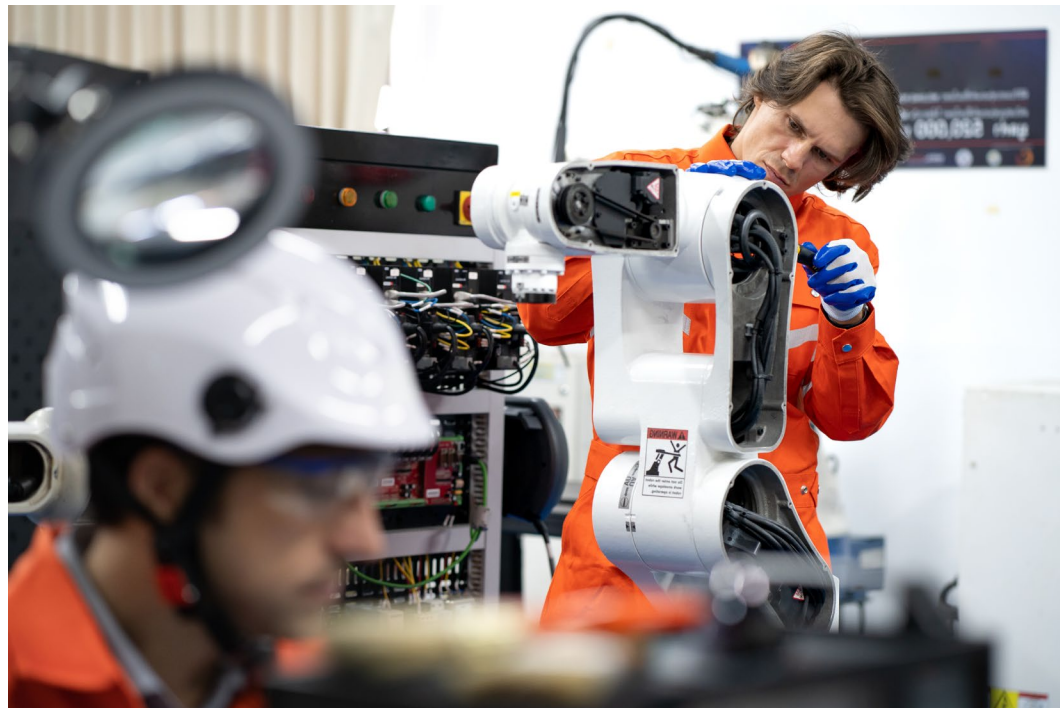
Distinguishing between traditional
and soft robotics





Hardware

Supply chains are difficult, and so
operating conditions for robots





Manufacturing

We must keep up with the high demand for robotics

