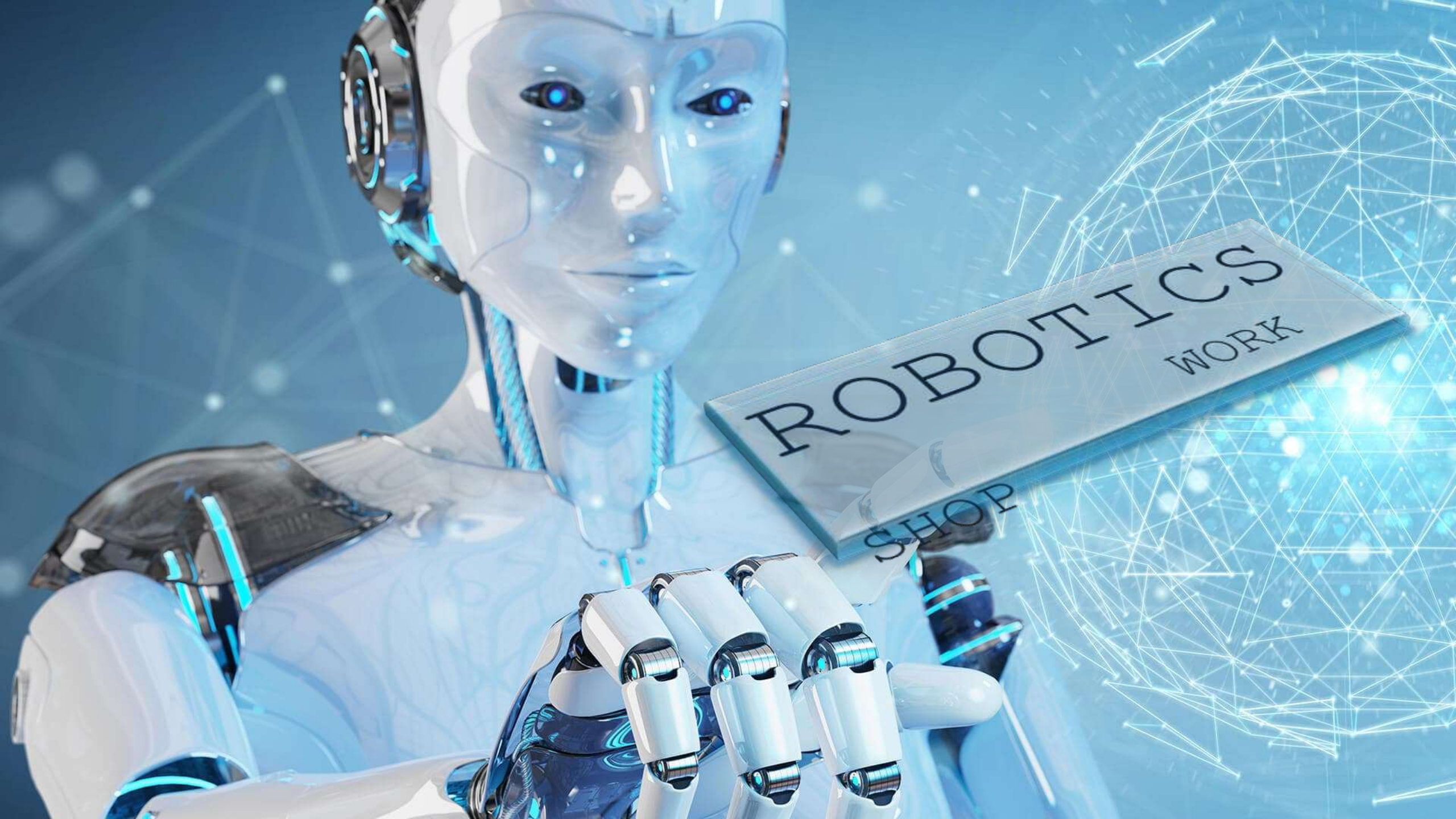
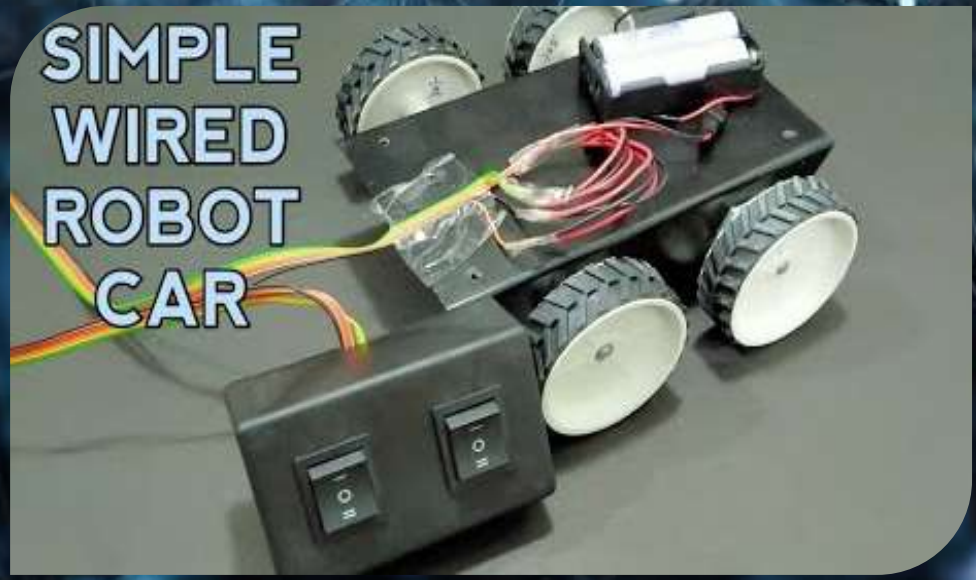

ROBOTICS
WORK
SHOP

WIRED ROBOT



INTRODUCTION OF WIRED ROBOT

- Wired robot is a type of robot that is connected to a power source or a control system through a physical wire or cable. This means that the robot is tethered to a external power source, control system, and receives its power, instructions, and data through this wired connection

REQUIREMENTS OF WIRED ROBOT:-

- metallic chassis
- Wheels
- Motors
- Battery
- Switch box
- Electric wire

ADVANTAGES OF WIRED ROBOT

- Reliability : Wired robots are less prone to interference, signal loss, or connectivity issues, ensuring consistence performance
- Security : Wired connections are more secure than wireless connections, reducing the risk of hacking or data breaches.
- Easy Maintenance : Wired robots often have easier maintenance and troubleshooting, as issues can be isolated to specific components or connections.
- Simple installation :Installation of wired robot is simple because less amount of components are

DISADVANTAGES OF WIRED ROBOT

- Limited mobility: Wired robots are tethered to a power source or control system, restricting their movement and range.
- Limited flexibility: Wired robots are less adaptable to changing environments or tasks.
- Limited scalability: Wired robots can be harder to integrate into larger systems or networks.
- Repair difficulties: Repairing or replacing damaged cables can be complicated.
- Aesthetics: Cables can be visually unappealing in certain applications (e.g., service robots in public spaces).

APPLICATIONS OF WIRED ROBOT

- Industrial applications
- Construction application
- Agriculture applications
- House hold applications
- Medical applications