AIVOT:
AIVOT Humanoid Robot

NCMS Technology Showcase
Puget Sound Naval Shipyard

PROBLEM STATEMENT

--Existing automation solutions are built for specific actions and work only in predictable conditions.

--They are resource-intensive to implement, need technical expertise, and require reimplementation if there is a change in the workflow.

--An operator is required to teleoperate the machine for complex scenarios.

BENEFITS

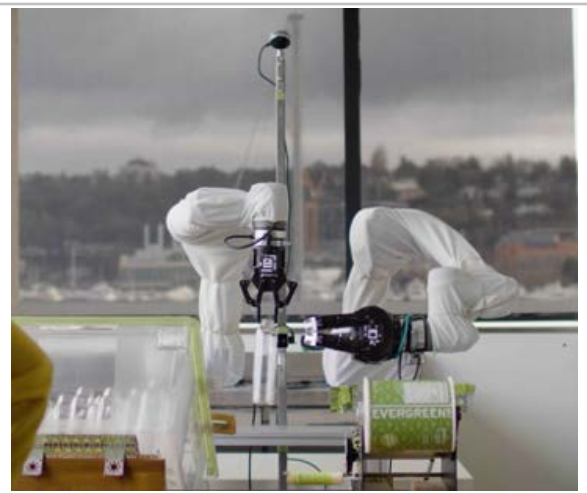
--Intuitive human/machine interface: Operators can use spoken English or other languages to interact with the robots.

--Cognitive decision-making: The robots function with a high autonomy level, do not require teleoperation, and can be configured to keep operators in the loop for strategic decision-making.

--Fast learning: The robots can be quickly adapted to new tasks or action sequences for different situations.

--Workforce multiplier: The robots drastically reduce automation systems' training and manning requirements.

TECHNOLOGY SOLUTION

--AIVOT builds intelligent humanoid robots to perform various complex tasks in dynamic environments using the latest AI advancements.
--The robots can navigate autonomously with their mobile bases and perform dexterous tasks using their two arms.
--They learn new skills by listening to spoken instructions and watching human demos.
--The robots follow operators' voice commands and act using vision.
--The software can be deployed on third-party hardware and unmanned systems.

GRAPHIC