

Humanoid robots and wearables for optimal ergonomics and minimal risks in future work environments





ergoCub is a joint project between the Italian Institute of Technology (IIT) and the National Institute for Insurance against Accidents at Work (INAIL).

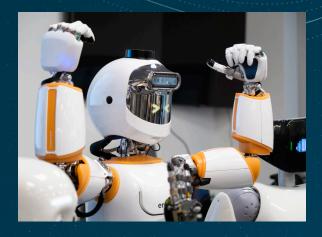
Our goal is to minimize the biomechanical risk of future workers while minimizing the psychosocial impact of the ergoCub technologies. Wearables track human kinematics and dynamics for online risk evaluation and enable physical human-robot collaboration for optimal ergonomic interaction.

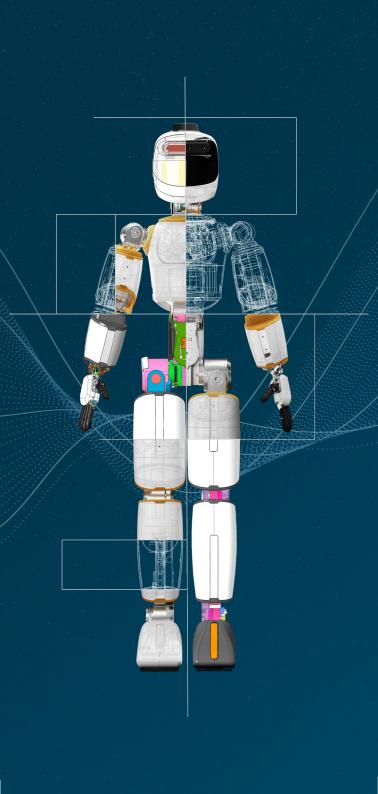




We apply collaborative robotics and ambient intelligence to:

- maximize ergonomics and technological acceptance in future industry and healthcare environments
- minimise psychophysical risks of future workers.







OUR TOOLS:

Robot:

ergoCub is a humanoid robot endowed with embodied intelligence and designed for optimal ergonomic human-robot interaction. It is 150 cm tall and weighs 55.7 kg.

• Wearable technology:

iFeel is a wearable system for online motion and force tracking. To learn more, visit www.ifeeltech.eu.

• Artificial intelligence:

AI provides tools for interpreting data and endowing robots with collaborative intelligence, such as Motion Analysis, Risk Prediction, Navigation, Computer Vision, Motion Planning, and Hardware Intelligence.

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