Institute of Intelligent Industrial Technologies and Systems for Advanced Manufacturing

STIIMA

MISSION

Study and develop methodologies and technologies to design sensing and intelligent perceptual systems for decision support in different application domains

MAIN RESEARCH BRANCHES

- Artificial and computation intelligence
- Perception systems for mobile robotics
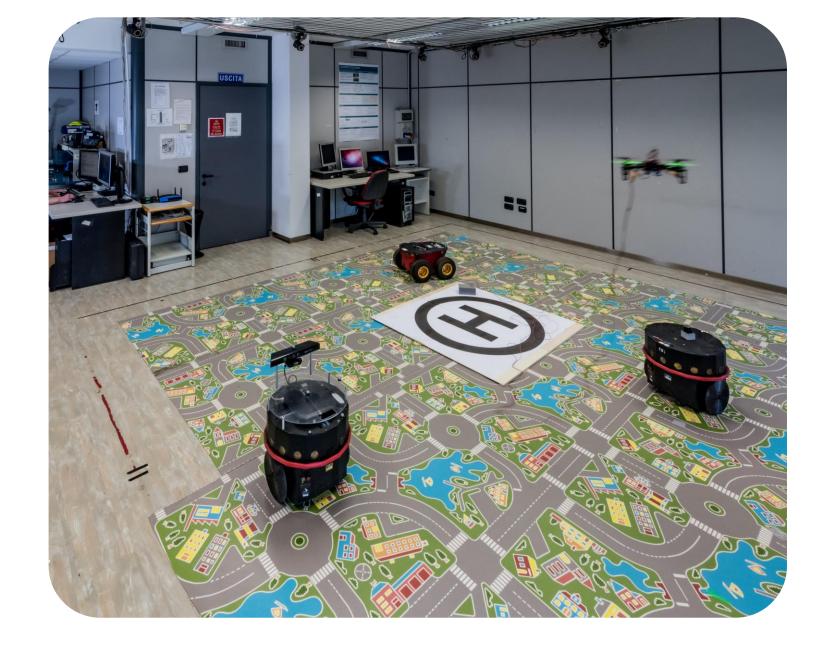- Human activity monitoring
- Materials and components modelling

METHODS

Artificial Intelligence
Machine Learning
Computer Vision and Pattern Recognition
Data Science
Intelligent Computational Approaches

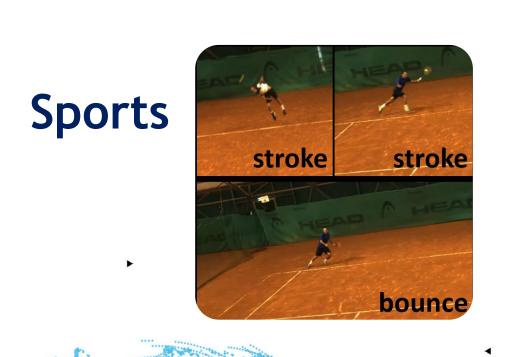## RESEARCH ACTIVITIES
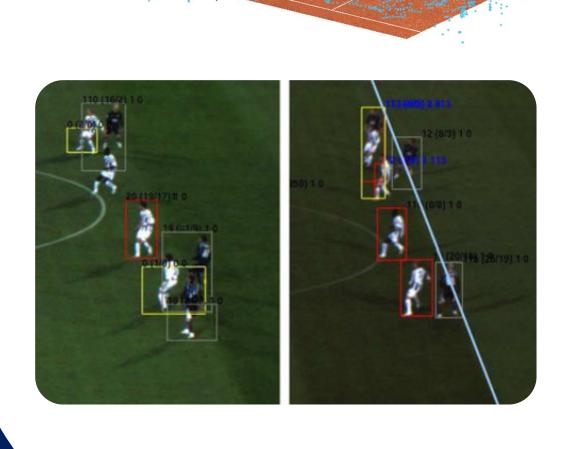
Data Acquisition
Data Processing
Data Interpretation and Decision Making

APPLICATIONS

Collaborative robotics in dynamic semi-structured and unstructured environments

Autonomous robot navigation, Automation and Logistics
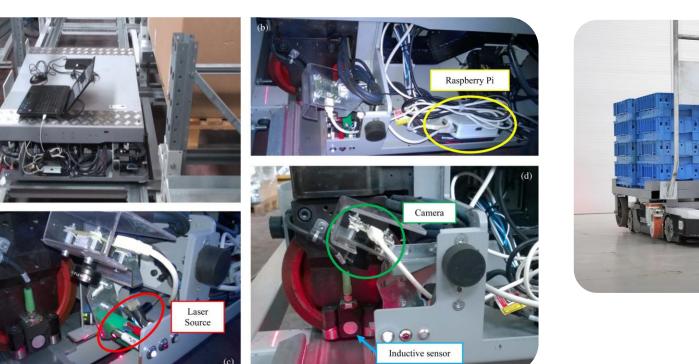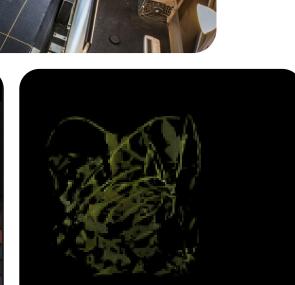
Food quality assessment
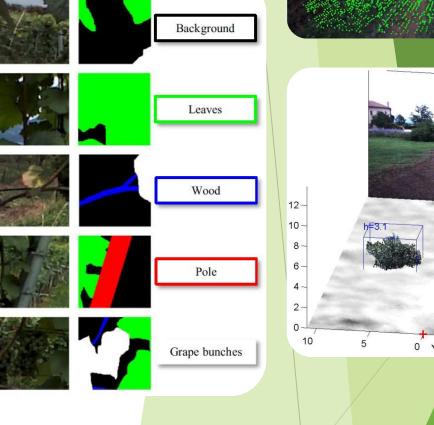
Phenotyping, Precision agriculture

Quality analysis and Diagnostics

Original image

Marine data science

Ambient assisted living, Surveillance

Background
Leaves
Wood
Pole
Grape bunches

Moving window (NxN), stride S_r

Aerospace

Sports

stroke   stroke

bounce

Railway

Bioinformatics, Drug design

COC1ccc(-c2c(Br)c(C(=O)NC3(C#N)CCOCC3)nn2-c2cc(Br)ccc2)cc1

CHARACTERS SELECTION

COC1ccc(-c2c(Br)c(C(=O)NC3(C#N)CCOCC3)nn2-c2cc(Br)ccc2)cc1

NETWORK INTERROGATION

QUERY

DEEP LEARNING

NEXT CHARACTER

GENERATION

GENERATED

COC1ccc(-c2c(Br)c(C(=O)NC3(CCN)CCOCC3)nn2-c2cc(Br)ccc2)cc1

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