ABOUT US

Robotics research is carried out since 35 years at PRISMA Lab in the Department of Electrical Engineering and Information Technology of the University of Naples Federico II.

The PRISMA Team leads the strategic research program in Robotics of CREATE Consortium, and the medical robotics activities of ICAROS Center. while flying tests with drones are conducted at CeSMA Center.

The facilities of the PRISMA Team include: B2R Lab - Biomimetic and Biohybrid Robotics Lab FIR Lab - Field and Industrial Robotics Laboratory FLARE - FLying AREna SUR Lab - Surgical Robotics Laboratory

FIGURES

1500 BOOKS, JOURNALS AND CONFERENCE **PAPERS**

180

PARTNERSHIPS WITH COMPANIES AND INSTITUTIONS

1.4 M€

ANNUAL FUNDING IN THE LAST 20 YEARS



OUR RESEARCH AGENDA

Our research @ PRISMA Lab is inspired by the four paradigms of Robotics: Design, Knowledge, Interaction, Impact. Our goal and our dream at the same time is to make robots useful and acceptable to humans.

AI & COGNITIVE ROBOTICS

AI & Cognitive Robotics (AICRob) aims to investigate models and methods for task planning, robot reinforcement learning, task-situated human intention/activity recognition, multimodal and adaptive interfaces, explanable AI in robotics.

MEDICAL ROBOTICS

Medical Robotics (MedRob) aims to develop robotic aids for rehabilitation, semi-autonomous control strategies for suturing, cutting, needle insertion, and new tactile sensing devices for biopsy and microsurgery.

HUMAN-ROBOT INTERACTION

Human-Robot Interaction (HuRoIn) aims to combine learning and model-based strategies to provide autonomy to robotic manipulation using shared control methods to guide remote robots via haptical interfaces.

AERIAL ROBOTICS

Aerial Robotics (AerRob) aims to design a new generation of flying service robots capable of supporting humans in inspection and maintenance tasks while ensuring an active and safe interaction with the remote scenario.

DYNAMIC MANIPULATION & LEGGED ROBOTICS

Dynamic Manipulation & Legged Robotics (DynLeg) aims to develop control solutions to improve legged robot locomotion, seeking links with non-prehensile manipulation while using dynamics to control the object motion.

INDUSTRIAL ROBOTICS

Industrial Robotics (IndRob) aims to develop new methodologies and technological solutions for integrating robots into smart factories using vision and force sensing to enable robot co-workers.













OUR EU PROJECTS





















































Follow us

- @prismalabunina
- @prismalabunina
- @ThePRISMAlab
- n @prisma-lab-unina



PRISMA.DIETI.UNINA.IT

Directions

University of Naples Federico II PRISMA Lab Via Claudio 21 Bldg 5/B 80125 Napoli, Italy

