

Vincenzo Lippiello

PROFESSOR · AUTOMATIC CONTROL & ROBOTICS

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“Nessun effetto è in natura senza ragione, intendi la ragione e non ti bisogna sperienza,” Leonardo Da Vinci.

Education

University of Naples Federico II

Naples, Italy

RESEARCH DOCTORATE DEGREE IN INFORMATION TECHNOLOGY

Mar. 2004

- Dissertation: “Multi-Object, Multi-Camera Robotic Visual Servoing”.
- Advisor: Prof. Luigi Villani.

University of Naples Federico II

Naples, Italy

PROFESSIONAL ENGINEER CERTIFICATE

Feb. 2001

University of Naples Federico II

Naples, Italy

‘LAUREA’ DEGREE IN ELECTRONIC ENGINEERING MAGNA CUM LAUDE

Dec. 2000

- Dissertation: “Architetture, Algoritmi di Calibrazione e Tecniche di Stima dello Stato per un Sistema Asservito in Visione” (in Italian).
- Advisor: Prof. Bruno Siciliano.

Skills

Main competences Robotics, Aerial Robotics, Robotic Manipulation, Visual Servoing, Automatic Control.

Programming C#, C/C++, SQL, Matlab/Simulink, $\text{\LaTeX}$.

Languages Italian (mother tongue), English (fluency).

Academic Positions

University of Naples Federico II

Naples, Italy

FULL PROFESSOR OF AUTOMATIC CONTROL

Feb. 2021 - PRESENT

University of Naples Federico II

Naples, Italy

ASSOCIATE PROFESSOR OF AUTOMATIC CONTROL

Nov. 2015 - Gen. 2021

University of Naples Federico II

Naples, Italy

RESEARCHER OF AUTOMATIC CONTROL

Nov. 2007 - Nov. 2015

Experience

Consorzio di Ricerca INSTM

Florence, Italy

SCIENTIFIC RESPONSIBLE

2018 - PRESENT

- Design and development of an ATEX-Zone 1 drone for Oil&Gas inspection. Customer: ENI SpA.
- Design and development of an aerial manipulator for UT measurements (NDT) in Oil&Gas facilities. Customer: ENI SpA.
- Feasibility study of service robotic solutions able to inspect vessels in Oil&Gas plants during normal operation. Customer: ENI SpA.

Consorzio di Ricerca C.R.E.A.T.E.

Naples, Italy

IN-HOUSE CONSULTANT

2005 - PRESENT

- Design and development of a robotic cell for the testing of DMI train interfaces. Customer: Ansaldo STS.
- Feasibility study for a visual inspection system suitable to be mounted on a VTOL UAV. Customer: GE Oil & Gas.
- Consultant for the development of a tele-operated dual-arm mobile robot for inspection and maintenance operation in the tunnel of the LHC accelerator. Customer: CERN.
- Consultant for the adoption of robotic solutions to support continuous steel casting processes. Customer: DANIELI S.p.A.
- Consultant for the synchronization of robotic multi-arm cells and additional axes. Customer: COMAU Robotica S.p.A.
- Consultant for the interaction control without force sensors in industrial robotic applications. Customer: COMAU Robotica S.p.A.

ASM (Azienda Speciale Municipalizzata)

Pomigliano d'Arco (NA), Italy

EXTERNAL CONSULTANT

2004 - 2006

- Software design of applications for the management of R.I.D. procedures, of defaulters and deferred payments, of institutional web-sites.
- Data-Centre and network management.

Comune di Pomigliano d'Arco

Pomigliano d'Arco (NA), Italy

EXTERNAL CONSULTANT

2003 - 2005

Consultant in the regional project AUREATECA (POR Campania 2000-2006, misura 6.2, Sviluppo della Società dell'Informazione, azione C) for the management of databases, e-procurement, optimization resources, networking.

E.B.B. Impianti S.r.l.

Sant'Anastasia (NA), Italy

IN-HOUSE CONSULTANT

2001 - 2002

Designer of electro-instrumental civil and industrial plants.

eSeeNet consulting S.r.l.

Sorrento, Italy

IN-HOUSE CONSULTANT

2001

Designer and software developer of applications for resource management, B2B, and e-Procurement.

Extracurricular Activity

Neabotics srl

Naples, Italy

FOUNDER & CEO

2018 - PRESENT

iTech Consulting srl

Pomigliano d'Arco, Italy

Co-FOUNDER & CEO

2006 - 2010

Research Council of Norway

Oslo, Norway

EXPERT PANEL MEMBER

2014 - 2019

- Expert on a referee panel for assessment of grant applications in Mathematics, Physical Science and Technology (FRINATEK) 2024.
- Expert on a referee panel for assessment of grant applications in Mathematics, Physical Science and Technology (FRINATEK) 2022.
- Expert on a referee panel for assessment of grant applications in Mathematics, Physical Science and Technology (FRINATEK) 2019.
- Expert on a referee panel for assessment of grant applications in Mathematics, Physical Science and Technology (FRINATEK) 2016.
- Expert on a referee panel for assessment of grant applications in Mathematics, Physical Science and Technology (FRINATEK) 2015.
- Expert on a referee panel in connection with the research funding scheme for Research Infrastructures (INFRA) 2015.
- Expert on a referee panel for assessment of grant applications in Mathematics, Physical Science and Technology (FRINATEK) 2014.

European Commission

Brussels, Belgium

EXPERT PANEL MEMBER

2014 - 2022

- Expert on a referee panel for assessment of grant applications in HORIZON-CL4-DIGITAL-EMERGING-02 (2022).
- Expert on a referee panel for assessment of grant applications in HORIZON-CL4-DIGITAL-EMERGING-01 (2021).
- Expert on a referee panel for assessment of grant applications in H2020-Robotics Call-ICT47 (2020).
- Expert on a referee panel for assessment of grant applications in H2020-Robotics Call-9 (2019).
- Expert on a referee panel for assessment of grant applications in H2020-Robotics Call-25 (2016).
- Expert on a referee panel for assessment of grant applications in H2020-Robotics Call-1 (2014).

National Center of Science and Technology Evaluation

Kazakhstan Republic

EXTERNAL EXPERT

2014 - pres.

- Expert for assessment of grant applications in the call "Grant Funding of research proposals 2015-pres."
- Expert for assessment of grant applications in the call "Network technologies laboratory" (2016-2019).

FIRST® LEGO® League Italia

Naples, Italy

MEMBER OF THE TECHNICAL JURY

2017

Honors & Awards

INTERNATIONAL

	1.7% worldwide top-scientists in the subfield <i>Industrial Engineering & Automation</i> , Ioannidis, John P.A., <i>Data for "Updated science-wide author databases of standardized citation indicators"</i> , Elsevier Data Repository, V7.	DOI: 10.17632/btchxk-tzyw.7
2024		
	2% worldwide top-scientists in the subfield <i>Industrial Engineering & Automation</i> , Ioannidis, John P.A., <i>Data for "Updated science-wide author databases of standardized citation indicators"</i> , Elsevier Data Repository, V6.	DOI: 10.17632/btchxk-tzyw.6
2023	Nomination for the Best Paper Award , J. Mellet, J. Cacace, F. Ruggiero and V. Lippiello, "Neural-Network for Position Estimation of a Cable-Suspended Payload Using Inertial Quadrotor Sensing", International Conference on Informatics in Control, Automation and Robotics.	Rome, Italy
2020	2% worldwide top-scientists in the subfield <i>Industrial Engineering & Automation</i> , J. Baas, K. Boyack, J. Ioannidis, <i>Data for "Updated science-wide author databases of standardized citation indicators"</i> , Mendeley Data, V2.	DOI: 10.17632/btchxk-tzyw.2
2016	Best Paper Award , A. Donaire, M. Crespo, F. Ruggiero, V. Lippiello, B. Siciliano, "Design, Implementation and Experiments of Robust Passivity-Based Control for a Rolling-Balancing System", 3th International Conference on Informatics in Control, Automation and Robotics.	Lisbon, Portugal
2016	Nomination for the Best Student Paper Award , D. Serra, A. Satici, F. Ruggiero, V. Lippiello, B. Siciliano, "An optimal trajectory planner for a robotic batting task: The table tennis example", 3th International Conference on Informatics in Control, Automation and Robotics.	Lisbon, Portugal
2014	Best Paper Award , R. Mebarki, V. Lippiello, "Image moments-based velocity estimation of UAVs in GPS denied environments", 12th IEEE International Symposium on Safety, Security, and Rescue Robotics.	Toyako-cho, Hokkaido, Japan
2013	Nomination for the Best Paper Award , J. Cacace, A. Finzi, V. Lippiello, G. Loianno, D. Sanzone, "Aerial Service Vehicles for Industrial Inspection: Task Decomposition and Plan Execution", 26th International Conference on Industrial, Engineering & other Applications of Applied Intelligent Systems.	Amsterdam, The Netherlands

DOMESTIC

	IEEE Robotics And Automation Italian Chapter (I-RAS) Young Author Best Paper Award , V. Lippiello, F. Ruggiero, B. Siciliano, L. Villani, "Visual Grasp Planning for Unknown Objects Using a Multi-Fingered Robotic Hand", IEEE/ASME Transactions on Mechatronics, 18 (3), 2013.	Bari, Italy
2015		
2013	Nomination for the Best Presentation Award , Convegno Automatica.it.	Palermo, Italy

Teaching

UNIVERSITY COURSES

Teoria dei Sistemi	University of Naples Federico II
COURSE OF COMPUTER SCIENCE ENGINEERING	2021 - pres.
Robotics	University of Naples Federico II
SEAS 4.0 MASTER COURSE OF INDUSTRIAL ROBOTICS	2021 - 2023
Robotic Lab	University of Naples Federico II
COURSE OF AUTOMATIC ENGINEERING	2019 - pres.
Fondamenti di Sistemi Dinamici	University of Naples Federico II
COURSE OF COMPUTER SCIENCE ENGINEERING	2017 - 2020
Elementi di Automatica	University of Naples Federico II
COURSE OF ELECTRIC ENGINEERING	2016 - pres.
Fondamenti di Sistemi Dinamici	University of Naples Federico II
JOINT COURSE OF ELECTRONIC AND TELECOMUNICATION ENGINEERING	2012 - 2017
Fondamenti di Sistemi Dinamici	University of Naples Federico II
COURSE OF COMPUTER SCIENCE ENGINEERING	2010 - 2012

Robotica Industriale

COURSE OF AUTOMATION ENGINEERING

[University of Sannio](#)

2007 - 2010

Tecnologie dei Sistemi di Automazione

JOIN COURSE OF COMPUTER SCIENCE AND ELECTRONIC ENGINEERING

[University of Naples Federico II](#)

2008 - 2010

Robotica Avanzata

COURSE OF COMPUTER SCIENCE ENGINEERING (*teaching assistant*)

[University of Naples Federico II](#)

2007 - 2009

Elementi di Automazione

COURSE OF COMPUTER SCIENCE ENGINEERING (*teaching assistant*)

[University of Naples Federico II](#)

2004 - 2007

Automatica

COURSE OF ELECTRIC ENGINEERING (*teaching assistant*)

[University of Naples Federico II](#)

2005 - 2006

Robotica Industriale

JOINT COURSE OF ELECTRONIC, COMPUTER SCIENCE, AND MECHANICS ENGINEERING (*teaching assistant*)

[University of Naples Federico II](#)

2000 - 2006

Controlli Automatici

COURSE OF ELECTRONIC ENGINEERING (*teaching assistant*)

[University of Naples Federico II](#)

2002 - 2004

PHD STUDENTS TUTORING

Andrea Capuozzo

XXXVIII CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

[University of Naples Federico II](#)

2023 - PRESENT

Giuseppe Rauso

XXXVIII CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

[University of Naples Federico II](#)

2023 - PRESENT

Francesca Pagano

XXXVII CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

[University of Naples Federico II](#)

2021 - PRESENT

Julien Mellet

XXXVII CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

[University of Naples Federico II](#)

2021 - PRESENT

Vincenzo Scognamiglio

XXXVII CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

[University of Naples Federico II](#)

2021 - PRESENT

Salvatore Marcellini

XXXVI CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

[University of Naples Federico II](#)

2020 - 2023

Dissertation: "Motion planning for autonomous unmanned aerial vehicles"

Fabrizio Tavano

XXXV CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

[University of Naples Federico II](#)

2019 - 2023

Dissertation: "Multi-Robot Distributed Strategies for Priority-Based Sanitization of Railway Stations"

Pierluigi Arpentì

XXXII CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

[University of Naples Federico II](#)

2017 - 2020

Dissertation: "Energy Shaping of Underactuated Systems via Interconnection and Damping Assignment Passivity-Based Control with Applications to Planar Biped Robots"

Diana Serra

XXIX CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

[University of Naples Federico II](#)

2014 - 2017

Dissertation: "Motion Planning and Control Methods for Nonprehensile Manipulation and Multi-Contact Locomotion Tasks"

Jonathan Cacace

XXVIII CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

[University of Naples Federico II](#)

2013 - 2016

Dissertation: "A Control Architecture for Unmanned Aerial Vehicles Operating in Human-Robot Team for Service Robotic Tasks"

Luca Rosario Buonocore

XXVII CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

Dissertation: "Mechatronics design of robotic systems"

University of Naples Federico II

2012 - 2015

Giuseppe Loiano

XXVI CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

Dissertation: "The Role of Vision Algorithms for Micro Aerial Vehicles"

University of Naples Federico II

2011 - 2014

Fabio Ruggiero

XXIII CICLO DEL DOTTORATO IN *Ingegneria Informatica ed Automatica*

Dissertation: "Grasp and manipulation of objects with a multi-fingered hand in unstructured environments"

University of Naples Federico II

2007 - 2010

OTHER UNIVERSITY SERVICES

Thesis Supervisor

SUPERVISOR OF MORE THAN 40 BACHELOR AND MASTER THESIS

University of Naples

2004 - PRESENT

Trainee Tutor

TUTOR OF MORE THAN 30 TRAINEES AT THE LABORATORY OF ROBOTICS *PRISMA Lab*

University of Naples

2008 - PRESENT

Laboratory Tutor

TUTOR FOR THE LABORATORY ACTIVITIES OF THE CORSE *Manipulators*, MASTER IN "ROBOTICA E SISTEMI INTELLIGENTI"

University of Naples

2010 - 2011

SEMINARS

AIRobots Summer School – Aerial Service Robotics

COURSE TITLE: "UAVS VISUAL SERVOING"

Swiss Federal Institute of Technology Zurich (ETH)

2012

OTHER COURSES

Training Course (in Italian)

INTERVENTI FORMATIVI E DI AFFIANCAMENTO NEI PROGETTI DI RIUSO DEGLI APPLICATIVI DELLA REGIONE CAMPANIA

A FAVORE DEGLI ENTI LOCALI

Docenza per i dipendenti dei comuni di Pomigliano D'Arco, Ottaviano e Castello di Cisterna, finanziato con il contributo del Fondo Sociale Europeo - Misura 3.22 (ex Misura 6.4) P.O.R. Campania 2000-2006

Pomigliano d'Arco, Italy

2008

Training Course (in Italian)

ROBOTICA INDUSTRIALE

Docenza specialistica per i dipendenti della DANIELI S.p.A.

Udine, Italy

2007

Training Course (in Italian)

FOR-ICT

Docenza per i dipendenti Comunali, codice Ufficio 38 – Fase A – P.O.R. Campania 2000/2006 Delibera G.R. n° 562 del 07/04/2004 – Decreto Dirigenziale n° 1006 del 02/12/04 Avviso Misura 6.4 – 3.8

Sant'Anastasia, Italy

2005

Training Course (in Italian)

PROGETTO ROBOGAT

Docenza erogata nell'ambito del progetto di ricerca su di un "Sistema robotizzato di spegnimento incendi e monitoraggio ambientale permanente per gallerie stradali e ferrovie", modulo formativo: *Termografia e Termocamera*

Naples, Italy

2005

Training Course (in Italian)

INFORMATIZZAZIONE DI BASE (ECDL)

Docenza specialistica per i dipendenti dell'Istituto Professionale Statale EUROPA

Pomigliano d'Arco, Italy

2004

Research Activity

INTERNATIONAL RESEARCH ACTIVITY

Project AERO-TRAIN

University of Naples Federico II

PRINCIPAL INVESTIGATOR

2021 - 2024

Scientific responsible of the operative unit for the Marie Skłodowska-Curie Innovative Training Networks “Aerial Robotic Training for the next generation of European infrastructure and asset maintenance technologies” (AERO-TRAIN), funded by the European Commission (G.A. 953454).

Project AERIAL-CORE

CREATE & University of Naples

Federico II

PRINCIPAL INVESTIGATOR

2019 - 2023

Scientific responsible of the operative unit for the international research project “AERIAL COgnitive integrated multi-task Robotic system with Extended operation range and safety” (AERIAL-CORE), funded by the European Commission (H2020 – ID. 871479 – www.aerial-core.eu).

Project HYFLIERS

CREATE & University of Naples

Federico II

PRINCIPAL INVESTIGATOR

2018 - 2020

Scientific responsible of the operative unit for the international research project “HYbrid FLying-rollIng with-snakE-aRm robot for contact inSpection” (HYFLIERS), funded by the European Commission (H2020 – ID. 779411 – www.hyfliders.eu).

Project REFILLS

CREATE & University of Naples

Federico II

EXPERT IN ROBOTIC MANIPULATION AND VISUAL SERVOING

2017 - 2020

Component of the operative unit for the coordination action “Robotics Enabling Fully-Integrated Logistics Lines for Supermarkets” (REFILLS), funded by the European Commission (H2020 – ID. 731590).

Project RockEU²

CREATE & University of Naples

Federico II

EXPERT IN AERIAL ROBOTICS

2016 - 2018

Component of the operative unit for the coordination action “Robotics Coordination Action for Europe Two” (RockEU²), funded by the European Commission (FP7 – ICT 688441).

Project AEROARMS

CREATE & University of Naples

Federico II

RESEARCHER ON VISUAL SERVOING FOR AERIAL MANIPULATION

2015 - 2019

Component of the research operative unit for the international research project “Aerial RObotic system integrating multiple ARMS and advanced manipulation capabilities for inspection and maintenance” (AEROARMS), funded by the European Commission (H2020–644271).

Project RoDyMan

CREATE & University of Naples

Federico II

RESEARCHER ON DYNAMIC NON-PREHENSILE MANIPULATION AND MECHATRONICS

2013 - 2018

Component of the research operative unit for the international research project “RObotic DYnamic MANipulation” (RoDyMan), funded by the European Commission (ERC-IDEAS–320992).

Project SHERPA

CREATE & University of Naples

Federico II

PRINCIPAL INVESTIGATOR

2013 - 2017

Scientific responsible of the operative unit for the international research project “Smart collaboration between Human and ground-aErial Robots for imPROving rescuing activities in alpine environments” (SHERPA), funded by the European Commission (FP7 Collaborative Project – ICT 600958 – www.sherpa-project.eu). EC funding of 941,800 euros (8,550,000 euros in total for the project).

Project EUROCC

CREATE & University of Naples

Federico II

RESEARCHER ON AERIAL ROBOTICS AND ROBOTIC GRASPING

2014 - 2017

Component of the research operative unit for the international research project “European Robotics Challenges” (EUROC), funded by the European Commission (FP7–608849).

Project RockEU

EXPERT IN AERIAL ROBOTICS

University of Naples Federico II

2013 - 2016

Component of the operative unit for the coordination action “Robotics Coordination Action for Europe” (RockEU), funded by the European Commission (FP7 – ICT 611247).

Project euRobotics

EXPERT IN AERIAL ROBOTICS

University of Naples Federico II

2013 - 2016

Component of the operative unit for the coordination and support action “European Robotics Coordination Action” (euRobotics), funded by the European Commission (FP7 – ICT 244852).

Project ARCAS

SCIENTIFIC RESPONSIBLE

University of Naples Federico II

2011 - 2015

Delegated scientific responsible of the operative unit for the international research project “Aerial Robotics Cooperative Assembly system” (ARCAS), funded by the European Commission (FP7 Collaborative Project – ICT 287617 – www.arcas-project.eu). EC funding of 1,023,200 euros (6,150,000 euros in total for the project).

Project AIRobots

SCIENTIFIC RESPONSIBLE

University of Naples Federico II

2010 - 2013

Delegated scientific responsible of the operative unit for the international research project “Innovative Aerial Service Robots for Remote Inspections by Contact” (AIRobots), funded by the European Commission (FP7 Collaborative Project – ICT 248669 – airobots.ing.unibo.it). EC funding of 530,072 euros (2,616,000 euros in total for the project).

Project ECHORD

RESEARCHER ON ROBOTIC MANIPULATION AND GRASPING

University of Naples Federico II

2008 - 2013

Component of the research operative unit for the international research project “The European Clearing House for Open Robotics Development” (ECHORD), funded by the European Commission (FP7–231143).

Project DEXMART

RESEARCHER ON ROBOTIC MANIPULATION AND GRASPING

University of Naples Federico II

2008 - 2012

Component of the research operative unit for the international research project “DEXterous and autonomous dual-arm/hand robotic manipulation with sMART sensory-motor skills: A bridge from natural to artificial cognition” (DEXMART), funded by the European Commission (FP7–216239).

Project PHRIENDS

RESEARCHER ON PHYSICAL HUMAN-ROBOT INTERACTION AND VISUAL SERVOING

University of Naples Federico II

2006 - 2009

Component of the research operative unit for the international research project “Physical Human-Robot Interaction: DepENDability and Safety” (PHRIENDS), funded by the European Commission (FP6–045359).

Project PHRIDOM / EURON II

RESEARCHER ON PHYSICAL HUMAN-ROBOT INTERACTION

University of Naples Federico II

2004 - 2006

Component of the research operative unit for the international research project “Physical Human-Robot Interaction in anthropic DOMains: safety and dependability” (PHRIDOM), funded by the European Commission (EURON-2 research project).

NATIONAL RESEARCH ACTIVITY

Project PON-PLACE

PRINCIPAL INVESTIGATOR

University of Naples Federico II

2021 - 2022

Scientific responsible of the operative unit for the National Operative Project (PON) “Conversione di Piattaforme Off Shore per usi multipli eco-sostenibili” (PLACE), funded by the *Ministero dell’Università e della Ricerca* (G.A. ARS01_00891).

Project MARsHaL

PRINCIPAL INVESTIGATOR

University of Naples Federico II

2017 - 2019

Principal investigator for the research project “Mobile Autonomous Robots for Hospital Logistics” (MARsHaL), funded by the *University of Naples Federico II*.

Project RoMoLO

EXPERT IN ROBOTICS AND VISUAL SERVOING

University of Naples Federico II

2017 - 2018

Component of the operative unit for the project of national operational plan (Horizon 2020 -- PON 2014/2020) “Robot modulari per la logistica ospedaliera” (RoMoLO), funded by the *Ministero dello Sviluppo Economico* (MISE).

Project ROCOCÒ

EXPERT IN ROBOTIC MANIPULATION

University of Naples Federico II

2011 - 2016

Component of the operative unit for the project of national interest (PRIN) "Robotica COoperativa e COllaborativa" (ROCOCÒ), funded by the *Ministero dell'Istruzione, dell'Università e della Ricerca* (MIUR).

Regional Research Project

EXPERT IN ROBOTIC MANIPULATION

University of Naples Federico II

2005 - 2006

Component of the operative unit for the regional research project (*Legge 5*) "Una architettura per la coordinazione senso-motoria basata sull'attenzione e anticipazione percettiva", funded by the *Regione Campania*.

Space Research Project

EXPERT IN ROBOTICS

University of Naples Federico II

2004 - 2005

Component of the operative unit for the fundamental research project "Robotic Technologies for On-Orbit Servicing", funded by the *Agenzia Spaziale Italiana* (ASI).

Space Research Project SUPER

EXPERT IN ROBOTICS

University of Naples Federico II

2004 - 2005

Component of the operative unit for the fundamental research project "Space Unmanned Planetray Exploration Rover" (SUPER), funded by the *Agenzia Spaziale Italiana* (ASI).

Project MATRICS

EXPERT IN ROBOTICS AND VISUAL SERVOING

University of Naples Federico II

2003 - 2004

Component of the operative unit for the project of national interest (PRIN) "Metodologie Applicazioni e Tecnologie Robotiche per l'Interazione la Cooperazione e la Supervisione" (MATRICS), funded by the *Ministero dell'Istruzione, dell'Università e della Ricerca* (MIUR).

Project MISTRAL

EXPERT IN ROBOTICS AND VISUAL SERVOING

University of Naples Federico II

2001 - 2002

Component of the operative unit for the project of national interest (PRIN) "Metodologie e Integrazione di Sottosistemi e Tecnologie per la Robotica Antropica e la Locomozione" (MISTRAL), funded by the *Ministero dell'Università e della Ricerca Scientifica e Tecnologica* (MURST).

Space Research Project

EXPERT IN ROBOTICS

University of Naples Federico II

2000 - 2004

Component of the operative unit for the fundamental research project "Sviluppo di test-bed per la manipolazione robotica in ambiente spaziale", funded by the *Agenzia Spaziale Italiana* (ASI).

Workshops

2015 **Co-organizer**, *Workshop on Aerial Manipulation* at the European Robotic Forum 2015

Vienna, Austria

Committees

PROGRAM COMMITTEES

2015 **Program Committee Member**, IEEE Symposium on Safety, Security and Rescue Robotics

West Lafayette,
Indiana, USA

2013 **Program Committee Member**, IEEE Symposium on Safety, Security and Rescue Robotics

Linköping
University, Sweden

2012 **Associate Editor**, 10th International IFAC Symposium on Robot Control

Dubrovnik, Croatia

2008 **Program Committee Member**, International Conference on Informatics in Control, Automation and Robotics

Madeira, Spain

TECHNICAL COMMITTEES AND EDITORIAL BOARDS

IFAC TC 4.3 Robotics

MEMBER OF THE IFAC TECHNICAL COMMITTEE ON ROBOTICS

2013-2016

Reviewer for international journals

IEEE Transactions on Robotics, IEEE RA-Letters, IEEE Transactions on Control Systems Technology, IEEE/ASME Transactions on Mechatronics, IEEE Transactions on Automation Science and Engineering, Robotica, International Journal of Robotics and Automation, International Journal of Robotics Research, Journal of Intelligent and Robotic Systems, Asian Journal of Control, Robotics and Autonomous Systems.

Reviewer for international conferences

IEEE International Conference on Robotics and Automation, IEEE/RSJ International Conference on Intelligent Robots and System, American Control Conference, European Control Conference, IEEE Conference on Decision and Control, IEEE/ASME International Conference on Advanced Intelligent Mechatronics, IFAC Symposium on Mechatronic System, IFAC Symposium on Robot Control, IEEE Conference on Multisensor Fusion and Integration for Intelligent Systems, European Robotics Symposium, IEEE Conference on Control Applications, IEEE International Workshop on Safety, Security and Rescue Robotics, IEEE International Conference on Automation Science and Engineering.

Publications

IN PRESS

INTN'L JOURNAL PAPERS

- [1] Semi-autonomous unmanned aerial manipulator teleoperation for push-and-slide inspection using parallel force/vision control
D'Angelo, S.; Selvaggio, M.; Lippiello, V., and Ruggiero, F.
Robotics and Autonomous Systems vol. 186 , p. 104 912, [2025](#).
DOI: <https://doi.org/10.1016/j.robot.2024.104912>
- [2] Efficiently Kinematic-Constraint-Coupled State Estimation for Integrated Aerial Platforms in GPS-Denied Environments
Lai, G.; Yu, Y.; Sun, F.; Qi, J., and Lippiello, V.
IEEE Robotics and Automation Letters , pp. 1–8, [2025](#).
DOI: [10.1109/LRA.2025.3536292](#)
- [3] Distributed Neural Network Controller Based on Feature Enhancement With Flexible Time Prescribed Performance for Multi-UAV Swarms
Wu, D.; Wang, M.; Zhang, Y.; Zhang, W.; Lippiello, V., and Siciliano, B.
IEEE Transactions on Aerospace and Electronic Systems , pp. 1–11, [2025](#).
DOI: [10.1109/TAES.2025.3542745](#)
- [4] Motor Fault Detection and Isolation for Multi-Rotor UAVs Based on External Wrench Estimation and Recurrent Deep Neural Network
Cacace, J.; Scognamiglio, V.; Ruggiero, F., and Lippiello, V.
Journal of Intelligent and Robotic Systems vol. 110, no. 4 , [2024](#).
DOI: [10.1007/s10846-024-02176-2](#)
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