



Francesco Argenziano

WORK EXPERIENCE

MILA - QUEBECE ARTIFICIAL INTELLIGENCE INSTITUTE - MONTRÉAL, CANADA

VISITING RESARCHER AT "MILA - QUEBEC ARTIFICIAL INTELLIGENCE INSTITUTE" - 01/02/2025 - 01/06/2025

PROF. DANIELE NARDI, PROF. SARA BERNARDINI - ROME, ITALY

UNIVERSITY TEACHING ASSISTANT IN "ARTIFICIAL INTELLIGENCE" - 09/2023 - 07/2025

PROF. DANIELE NARDI, PROF. SARA BERNARDINI

UNIVERSITY TEACHING ASSISTANT IN "FUNDAMENTALS OF ARTIFICIAL INTELLIGENCE" - 03/2024 - 07/2025

PROF. DANIELE NARDI, PROF. LUCA IOCCHI

UNIVERSITY TEACHING ASSISTANT IN "BASICS OF PROGRAMMING" - 03/2023 - 09/2023

EDUCATION AND TRAINING

11/2022 - CURRENT Rome, Italy

PHD STUDENT OF THE NATIONAL DOCTORATE IN ARTIFICIAL INTELLIGENCE Sapienza University of Rome

Field of study Artificial Intelligence | Level in EQF EQF level 8

09/2020 - 07/2022 Rome, Italy

MASTER'S DEGREE IN ARTIFICIAL INTELLIGENCE AND ROBOTICS Sapienza University of Rome - Department of Computer, Control, and Management Engineering

Field of study Artificial Intelligence, Robotics | Final grade 110/110 Cum Laude and Honors | Level in EQF EQF level 7 |

Thesis Knowledge Graph Completion for Robot Semantic Mapping

09/2017 - 09/2020 Naples, Italy

BACHELOR'S DEGREE IN COMPUTER ENGINEERING University of Naples "Federico II"

Field of study Computer Engineering, Computer Science | Final grade 110/110 Cum Laude | Level in EQF EQF level 7 |

Thesis Tecniche di Segmentazione per Immagini Medicali

2012 - 2017 Marcianise, Italy

HIGH SCHOOL DIPLOMA OF LICEO SCIENTIFICO OPZIONE SCIENZE APPLICATE Liceo Scientifico "Federico Quercia"

Final grade 100/100 Cum Laude | Level in EQF EQF level 6

LANGUAGE SKILLS

Mother tongue(s): ITALIAN

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C2	C2	C1	C1	C1

● PUBLICATIONS

2025

Dynamic Objects Relocalization in Changing Environments with Flow Matching

Authors: **Francesco Argenziano**, Miguel Saavedra-Ruiz, Sacha Morin, Daniele Nardi, Liam Paull

Perception and Planning for Mobile Manipulation in Changing Environments Workshop (@IROS 2025)

Agentic Scene Policies: Unifying Space, Semantics, and Affordances for Robot Action

Authors: Sacha Morin, Kumaraditya Gupta, Mahtab Sandhu, Charlie Gauthier, **Francesco Argenziano**, Kirsty Ellis, Liam Paull

arXiv preprint, submitted to ICRA 2026

Context Matters! Relaxing Goals with LLMs for Feasible 3D Scene Planning

Authors: Emanuele Musumeci, Michele Brienza, **Francesco Argenziano**, Vincenzo Suriani, Daniele Nardi, Domenico D. Bloisi

arXiv preprint, submitted to ICRA 2026

2025

Defining and Monitoring Complex Robot Activities via LLMs and Symbolic Reasoning

Authors: **Francesco Argenziano**, Elena Umil, Francesco Leotta, Daniele Nardi

The 37th IEEE International Conference on Tools with Artificial Intelligence (ICTAI)

2024

EMPOWER: Embodied Multi-role Open-vocabulary Planning with Online Grounding and Execution

Authors: **Francesco Argenziano**, Michele Brienza, Vincenzo Suriani, Daniele Nardi, Domenico D. Bloisi

2024 IEEE/RSJ International Conference on Intelligent Robots and Systems (IROS)

2024

Multi-Agent Planning using Visual Language Models

Authors: Michele Brienza, **Francesco Argenziano**, Vincenzo Suriani, Domenico D. Bloisi, Daniele Nardi

ECAI 2024, 3605-3611

2024

Neural Reward Machine

Authors: Elena Umili, **Francesco Argenziano**, Roberto Capobianco

ECAI 2024, 3055-3062

2023

Visual reward machines

Authors: Elena Umili, **Francesco Argenziano**, Aymeric Barbin, Roberto Capobianco

7th International Workshop on Neural-Symbolic Learning and Reasoning (**NeSy 2023**)

2023

Enhancing Graph Representation of the Environment through Local and Cloud Computation

Authors: **Francesco Argenziano**, Vincenzo Suriani, Daniele Nardi

Robot Representations for Scene Understanding, Reasoning and Planning Workshop (@RSS 2023)

2022

Knowledge Acquisition and Completion for Long-Term Human-Robot

Authors: Ermanno Bartoli, **Francesco Argenziano**, Vincenzo Suriani, Daniele Nardi,

21st International Conference of the Italian Association for Artificial Intelligence (**AIXIA 2022**)

HONOURS AND AWARDS

16/05/2024

Excellent Graduate - 2021/2022 Academic Year - Sapienza University of Rome

Top 2% graduate out of 19.000+ graduates

2022

Excellence Program Membership

Selected to participate to the Excellence Program during the 2nd year of Master's Degree @ Sapienza University of Rome

2020

Scholarship "Wanted the Best" - Sapienza University of Rome

Winner of the scholarship "Wanted the Best" from the University of Rome "La Sapienza" as one of the top 85 Master's students enrolling in.

2021

1st place at "Sign Language Generation" Challenge @ SciRoc Challenge (Smart City Robotics Challenge)

Winner of Episode 2 "Sign Language Generation" of the 2nd SciRoc Challenge (Smart City Robotics Challenge),