

PERSONAL INFORMATION

EMANUELE ANTONIONI

WORK EXPERIENCE

2017-2020

AI ENGINEER

QOOWEAR

Rome

I developed artificial intelligence algorithms for a startup that proposed the creation of autoregulating thermal wearables. Qoowear won one of the grants awarded by the Horizon2020 project.

2016-2017

Web Developer

Kitel s.r.l

Rome

I worked as a web developer for a company that managed bulk-sms buying and selling portals.

STUDY TITLES

2019–present

Ph.D Computer Engineering

Sapienza University of Rome

Thesis work on the integration of Automated Planning and Reinforcement Learning for robot behaviors.

2022–2022

Ph.D. - Computer Engineering, Abroad Visiting period

King's College of London

I worked on the use of a mixture of model-learners to fasten up the learning process of the transition system of a model-based RL algorithm.

2021–2021

Deep Learning and Reinforcement Learning Summer School

2021 CIFAR Deep Learning + Reinforcement Learning Summer School, Online (closed number)

I have taken high-level, in-depth classes with several top of the field professors, including Yoshua Bengio, Doina Precup, and Richard Sutton.

2016–2019

Master Degree in Artificial Intelligence and Robotics

Sapienza University of Rome

109/110

Thesis work on the integration of a sub-optimal planner with a model-free RL algorithm for soccer robots' behaviors.

2012–2016

Bachelor Degree in Computer Science

University of studies of Rome "Tor Vergata"

103/110

Thesis on the use of statistical learning techniques for Facebook comments' sentiment analysis.

PERSONAL SKILLS

Mother tongue Italian

Other languages

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1
IELTS 7.0/9.0 (Released by the British Council of Rome)					

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user

[Common European Framework of Reference for Languages](#)

PUBLICATIONS

2022 **Adaptive Team Behavior Planning using Human Coach Commands**
 RoboCup 2022: Robot World Cup XXV Status: Accepted

2022 **Nothing About Us Without Us: a participatory design for an Inclusive Signing Tiago Robot**
 IEEE Ro-Man 2022 Status: Accepted

2021 **Questioning Items’ Link in Users’ Perception of a Training Robot for Elders**
 International Conference on Social Robotics Status: Accepted and Published

2021 **Coordination and Cooperation in Robot Soccer**
 International Conference on Computational Collective Intelligence Status: Accepted and Published

2021 **Game strategies for physical robot soccer players: a survey**
 IEEE Transactions on Games Status: Accepted and Published

2021 **Learning a Symbolic Planning Domain through the Interaction with Continuous Environments**
 ICAPS PRL Workshop, 2021 Status: Accepted and Published

2021 **Learning from the Crowd: Improving the Decision-Making Process in Robot Soccer Using the Audience Noise**
 RoboCup 2021: Robot World Cup XXIV, Springer-Verlag, 2022 Status: Accepted and Published, (Best Paper Award winner)

2021 **Improving Sample Efficiency in Behavior Learning by Using Suboptimal Planners for Robots**
 RoboCup 2021: Robot World Cup XXIV, Springer-Verlag, 2022 Status: Accepted and Published

2020 **Autonomous and remote-controlled humanoid robot for fitness training**
 Companion Publication of the 2020 International Conference on Multimodal Interaction Status: Accepted and Published

OTHER PROJECTS

2019-Ongoing RoboCup@Soccer SPL

Team Leader

From 2019 I have become the Team Leader of the Sapienza SPQRTeam. I managed the robot behavior development department, coordinating the activities of different team members.

2020-2022 RoboCup@Soccer SPL

Technical Committee

I cooperated in writing the official competition rulebook, and developing and creating rules and challenges for participating teams.

2020-2021 SCIROC - Smart City Robotic Challenge

Technical Committee I contributed to the creation and regulation of a challenge about the use of a signing robot for interaction with deaf people.

2017-2019 RoboCup@Soccer SPL

Team Member

Active member of the Sapienza RoboCup@Soccer SPL team. I have been working mainly using the NAO Robots as a platform. I worked as a robot network communication expert and player behavior developer.

SKILLS

Reinforcement Learning	5+ yrs
Automated Planning	5+ yrs
Machine Learning	5+ yrs
C++	5+ yrs
Python	5+ yrs
Robot Programming	5+ yrs
PyTorch	3+ yrs
Scikit Learn	5+ yrs
Tensorflow	3+ yrs
Linux	5+ yrs
Web Development	5+yrs
Teaching	3+ yrs
Team Leadership	3+ yrs
Project Management	3+ yrs