Vincenzo Suriani

Education

2020 - 2023, Sapienza University of Rome
PhD Program in Computer Engineering

2015 - 2019, Sapienza University of Rome
MEng in Artificial Intelligence and Robotics

2009 - 2015, Sapienza University of Rome
BS in Engineering in Computer Science and Control Engineering

Experience

October 2015 - present, *Team Leader*, **SPQR Team**[1]
Team Development Leader in the RoboCup team of the Department of Computer, Control, and Management Engineering Antonio Ruberti at Sapienza University of Rome, involved in RoboCup competitions since 1998. Detailed achievements:

- Participation in **RoboCup 2023**[2], held in Bordeaux (France) with SPQR Team.
- Participation in **RoboCup 2022**[3], held in Bangkok (Thailand) with SPQR Team.
- Participation in **RoboCup 2021**[4], with SPQR Team.
- Participation in **RoboCup 2019**[5], held in Sydney (Australia) with SPQR Team.
- Participation in **RoboCup Asia Pacific Invitation Tournament 2019**[6], held in Tianjin (China) with SPQR Team.
- Participation in **Robotic Hamburg Open Workshop (RoHOW) 2018**[7], held in Hamburg (Germany) with SPQR Team.
- Participation in **RoboCup 2018**[8], held in Montréal (Canada) with SPQR Team.
- Participation in **German Open 2017**[9], held in Magdeburg (Germany) with SPQR Team.
- Participation in **RoboCup 2016**[10], held in Leipzig (Germany) with SPQR Team.

June 2022, *Research School*
International Artificial Intelligence in Bergen Research School. University of Bergen [11]

November 2019 - October 2020, *Researcher Assistant*
Department of Computer, Control, and Management Engineering Antonio Ruberti at Sapienza University of Rome

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[1]http://spqr.diag.uniroma1.it/
[2]https://2023.robocup.org/en/home/
[3]https://2022.robocup.org/
[4]https://2021.robocup.org/
[5]https://2019.robocup.org/
[6]http://robocupap.org/
[7]https://rohow.de/2018/en/
[8]http://www.robocup2018.org/
[9]https://www.robocupgermanopen.de/
[10]http://www.robocup2016.org/
[11]https://researchschool.w.uib.no/

February 2014 - October 2015, *Team Member***, SPQR Team**
Detailed achievements:

- Participation in **RoboCup 2015**[12], held in Hefei (China) with SPQR Team which compete in SPL league with NAO robots.
- Participation in **RoboCup 2014**[13], held in João Pessoa (Brazil) with SPQR Team as described above.

Publications

- (2023) *F. Argenziano,* ***V. Suriani***, *D. Nardi*
  Enhancing Graph Representation of the Environment through Local and Cloud Computation
  RSS 2023 Workshop

- (2023) ***V. Suriani***, *E. Musumeci, D. Nardi, D.D. Bloisi*
  Play Everywhere: A Temporal Logic based Game Environment Independent Approach for Playing Soccer with Robots
  Robot World Cup 2023, Best Paper Award Winner

- (2023) ***V. Suriani***, *D Nardi*
  Preserving HRI Capabilities: Physical, Remote and Simulated Modalities in the SciRoc 2021 Competition
  HRI 2023 Workshop

- (2022) *E. Bartoli, F. Argenziano,* ***V. Suriani***, *D. Nardi*
  Knowledge Acquisition and Completion for Long-Term Human-Robot Interactions using Knowledge Graph Embedding
  AIxIA 2022

- (2022) *E. Musumeci,* ***V. Suriani***, *E. Antonioni, D. Nardi, D.D. Bloisi*
  Adaptive Team Behavior Planning using Human Coach Commands
  RoboCup Symposium 2022

- (2022) *A. Pennisi, D.D. Bloisi,* ***V. Suriani***, *D. Nardi, A. Facchiano, A.R. Giampetruzzi*
  Skin Lesion Area Segmentation Using Attention Squeeze U-Net for Embedded Devices
  Journal of Digital Imaging, 1-14

- (2021) ***V. Suriani***, *S. Kaszuba, S.R. Sabbella, F. Riccio, D. Nardi*
  S-AvE: Semantic Active Vision Exploration and Mapping of Indoor Environments for Mobile Robots
  2021 European Conference on Mobile Robots (ECMR), 1-8

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[12]http://www.robocup2015.org/
[13]http://www.robocup2014.org/

- (2021) *E. Antonioni, P. Bisconti, N. Massa, D. Nardi,* **V. Suriani**
  Questioning Items' Link in Users' Perception of a Training Robot for Elders
  International Conference on Social Robotics, 509-518

- (2021) **V. Suriani**, *E. Antonioni, F. Riccio, D. Nardi*
  Coordination and Cooperation in Robot Soccer
  International Conference on Computational Collective Intelligence, 215-227

- (2021) *E. Antonioni,* **V. Suriani**, *D. Nardi, D.D. Bloisi*
  Learning from the Crowd: Improving the Decision Making Process in Robot Soccer using the Audience Noise
  RoboCup Symposium Best Paper Award 2021

- (2021) *S. Kaszuba, S.R. Sabbella,* **V. Suriani**, *F. Riccio, D. Nardi*
  RoSmEEry: Robotic Simulated Environment for Evaluation and Benchmarking of Semantic Mapping Algorithms
  arXiv preprint arXiv:2105.07938

- (2021) *E. Antonioni,* **V. Suriani**, *F. Riccio, D. Nardi*
  Game Strategies for Physical Robot Soccer Players: A Survey
  IEEE Transactions on Games

- (2020) *E. Antonioni,* **V. Suriani**, *N. Massa, D. Nardi*
  Autonomous and Remote Controlled Humanoid Robot for fitness training

- (2019) *V. Di Giambattista, M. Fawakherji,* **V. Suriani**, *D.D. Bloisi*
  On Field Gesture-based Robot-to-robot Communication with NAO Soccer Players
  Robot World Cup, 367-375

- (2017) *D. Bloisi, F. Del Duchetto, T. Manoni,* **V. Suriani**.
  Machine Learning for RealisticBall Detection in RoboCup SPL
  arXiv preprint arXiv:1707.03628

- (2016) *D. Albani, A. Youssef,* **V. Suriani**, *D. Nardi, and D.D. Bloisi.*
  A Deep Learning Approach for Object Recognition with NAO Soccer Robots
  Robot World Cup, 392-403

Languages

Mother Tongue
- Italian

Other Language(s)
- English   *Intermediate*
- French   *Basic*

Software Development Skills

Programming

- Java
- Matlab
- Python
- Javascript
- Android
- C++
- LaTeX
- Prolog
- HTML

Frameworks

- BHuman
- ROS
- Tree.js
- NAOqi for NAO
- Wordpress

Other Software Developed

- Android application published on the PlayStore with more than 6000 downloads and more that 1300 active users:
  https://play.google.com/store/apps/details?id=com.vincapps.vincenzo.yrordermanager&hl=it

- WebGL online FPS game:
  http://www.visur.altervista.org/PlanetEscape.html

- MATLAB experience:
  - Simulation of UAV Systems
  - Implementation of Image Compression Algorithms

- ROS Experience:
  - Development of ROS modules for humanoid control
  - Development of ROS environments for the European Projects:
    - Eurobench (Madrob and Beast)
    - Sciroc 2: Episode 1 and Episode 3

- Steganography:
  - Manipulation of PDF document for information embedding
  - Manipulation of JPEG, PNG, TIFF images for information encoding and decoding