

Curriculum Vitae

1. PERSONAL INFORMATION

First Name: Daniela
Last Name: D'Auria
Nationality: Italian

2. ACADEMIC TITLES

2.1 Academic degrees

- University of Naples “Federico II”, PhD in Computer Science and Automation Engineering
- University of Naples “Federico II”, Master Degree in Biomedical Engineering
- University of Naples “Federico II”, Bachelor Degree in Biomedical Engineering

2.2 Habilitations

- Member of Ordine degli Ingegneri della Provincia di Napoli
- Ordine degli Ingegneri - Chartered Engineer Industrial Sector
- Ordine degli Ingegneri - Chartered Engineer Information Sector

2.3 International Awards

- IEEE Best Leadership Award, Presented at IEEE ISM/IRC/BigMM 2022

3. PROFESSIONAL TITLES

3.1 Present Appointment

Tenure-Track Assistant Professor (ING-INF/05) at the Faculty of Engineering of the University Mercatorum, ITALY

3.2 Development of computer science and robotic systems

- Support in designing and developing a multi-agent based system for epilepsy. [J16]
- Support in designing and developing an integrated framework leveraging intelligent agents and complex event processing to improve patient monitoring. [J15]
- Support in building an heterogeneous graph from Italian EHRs. [J13]
- Support in the development of a tourist trip planning system with social sensing. [J11], [J12]
- Development of a new manipulator aimed at improving the electromechanical limitations of current surgery robotic systems. [T-1]
- Development of an innovative surgery simulator able to address some obstacles when doing some open surgery performances. [J-1], [C-1]
- Modeling of dynamic systems in the agricultural and robotic surgery contexts. [J-2], [C-2], [C-4], [C-6], [C-14]
- Design, implementation, and experimental evaluation of a system based on human-computer interaction. [C-12]
- Worked on augmented reality platforms for robotic-assisted laparoscopic surgery. [T-1]
- Worked on a haptic interface for autonomous robot-assisted surgery. [C-11], [C-12]
- Development of a system for rehabilitation robotics. [C-11], [C-12]
- Design and development of a prosthesis for surgical purposes. [J-9]

- Design and development of a 3D audio system for cultural heritage purposes. [J-5], [C-5], [C-7]
- Development of an eye tracker system for cultural heritage purposes. [J-4], [C-8]
- Development of a medical robotic system using semantic information. [J-7], [C-12], [C-17], [C-19]
- Development of a robot to be used in the video surveillance context. [J-8], [C-20], [C-23]

3.3 Coordination and/or participation in scientific and industrial research projects

reCOVeryaID Project

Title: An intelligent telemonitoring application for symptomatic, asymptomatic and pre-symptomatic coronavirus patients. *Objective:* Developing an intelligent telemonitoring system, which foresees the use of traditional diagnostic devices, such as a thermometer and a saturimeter, will therefore make it possible to: -Leave at home subjects who are not in imminent danger, thus avoiding occupying hospital beds; -Monitor subjects at risk with possible respiratory crises; -Monitor that part of the population who have not been administered the test for COVID-19, but who may be asymptomatic or pre-symptomatic subjects (such as patients in precautionary quarantine); -Measure the essential parameters, in order to avoid a respiratory crisis for patients affected with COVID-19 in a non-serious form; -Allow General Practitioners (GPs) to keep the patient under constant control, thus avoiding the risk of possible infection due to direct and repeated contact over time.

Funded grant applications

Projects for which I am the principal investigator (PI):

- **reCOVeryaID**

- Role: PI
- Performance Period: June 2021 – today
- Funding: from the Italian Ministry (FISR 2020 call)
- Acceptance rate: 2.3 %
- Collaborators: Sant'Anna School of Advanced Studies, Pisa, Italy

- **reCOVeryaID**

- Role: PI
- Performance Period: June 2021 – July 2023
- Funding: from the Province of Bolzano (RTD 2021 call)
- Collaborators: George Mason University, USA

SARRI Project

Title: The SmArt Rapiro Robot Integrating a framework for the automatic high-level surveillance event detection. *Duration:* 9 months. *Starting Date:* 2017. Grant from the Free University of Bozen-Bolzano. *Objective:* The aim of this project is to integrate a framework for high-level surveillance event detection with a smart robot able to significantly support the overall monitoring process.

OrCHeSTRA Project

Title: ORganization of Cultural HERitage and Smart Tourism and Real-time Accessibility. *Duration:* 48 months. *Starting Date:* 2014. Grant by Ministero dell'Istruzione, dell'Università e della Ricerca - Fondo Europeo di sviluppo regionale (PON). *Objective:* The aim of the project was to provide technological support for smart tourism in Naples.

e-HealthNet Project

Title: software ecosystem for eHealth. *Duration:* 48 months. *Starting Date:* expected 2013, effective 2015. Grant by Ministero dell'Istruzione, dell'Università e della Ricerca - Fondo Europeo di sviluppo regionale (PON R&C). I wrote the WP2.6 of this project related to "Simulators for Robot-Assisted Laparoscopic".

3.4 Direction of or participation in conference program committees and workshops and review of conferences and journals

3.4.1 Journal Editorial Activities

- Associate Editor of International Peer Reviewed Journal - Since 2017 – today
 - International Journal of Robotic Computing (IJRC) – KS PRESS
- Special Issue Editor
 - International Journal of Semantic Computing (IJSC) – World Scientific - Since 2016 – today
 - Encyclopedia with Semantic Computing and Robotic Computing (ESCRI) – World Scientific - Since 2017 – today

3.4.2 Conference and Workshop Activities

2024

- **NEW: General Co-Chair - Main organizer** of the 1th IEEE International Conference on Artificial Intelligence for Medicine, Health, and Care, AIHMC 2024, Laguna Hills, CA, USA, 5-7 Feb 2024 (**co-founder of the conference**)
- **Main Program Co-Chair - Main organizer** of the 17th IEEE International Conference on Semantic Computing (IEEE ICSC 2024), Laguna Hills, CA, USA, 5-7 Feb 2024
- **Main Program CO-Chair** of the 8th IEEE International Conference on Robotic Computing (IEEE IRC 2024), Hitachi Central Research Laboratory, Tokyo, Japan, 11-13 DEC 2024

2023

- **Main Program Co-Chair - Main organizer** of the 16th IEEE International Conference on Semantic Computing (IEEE ICSC 2023), Laguna Hills, CA, USA, 1-3 Feb 2023
- **Program Co-Chair - Main organizer** of the 6th IEEE International Conference on Robotic Computing (IEEE IRC 2023), Laguna Hills, CA, USA, 11-13 Dec, 2023
- **Program Co-Chair - Main organizer** of the 6th IEEE International Conference on Artificial Intelligence for Industries (IEEE ai4i 2023), Laguna Hills, CA, USA, 25-27 Sept 2023
- **Program Co-Chair** of the 25th IEEE International Symposium on Multimedia, ISM 2023, Laguna Hills, CA, USA, 11-13 Dec, 2023
- **Program Committee member**, The 2nd Workshop on User-Centric Narrative Summarization of Long Videos, In conjunction with ACM MM 2023, Oct 29, 2023, Ottawa, Canada

2022

- **Program Co-Chair - Main organizer** of the 15th IEEE International Conference on Semantic Computing (IEEE ICSC 2022), Virtual
- **Program Co-Chair - Main organizer** of the 6th IEEE International Conference on Robotic Computing (IEEE IRC 2022), Naples, Italy
- **Program Co-Chair - Main organizer** of the 5th IEEE International Conference on Artificial Intelligence for Industries (IEEE ai4i 2022), Laguna Hills, CA, USA
- **Program Co-Chair** of the 24th IEEE International Symposium on Multimedia, ISM 2022, Naples, Italy
- **Program Committee member**, The 1st Workshop on User-Centric Narrative Summarization of Long Videos, In conjunction with ACM MM 2022, Lisbon, Portugal
- **Program Committee member**, the 21st IEEE/WIC/ACM International Conference on Web Intelligence and Intelligent Agent Technology, 2022, Niagara Falls, Canada

2021

- **Program Co-Chair - Main organizer** of the 4th IEEE International Conference on Artificial Intelligence for Industries (IEEE ai4i 2021), Virtual
- **Program Co-Chair - Main organizer** of the 14th IEEE International Conference on Semantic Computing (IEEE ICSC 2021), Virtual
- **Program Co-Chair** of the 5th IEEE International Conference on Robotic Computing, Taichung, Taiwan, 2021
- **Program Co-Chair** of the 23rd IEEE International Symposium on Multimedia, ISM 2021, Virtual
- **Program Co-Chair and Main organizer** of the 5th International Workshop on Semantic Robotics (SR 2021), Virtual

2020

- **Program Co-Chair - Main organizer** of the 3th IEEE International Conference on Artificial Intelligence for Industries (IEEE ai4i 2020), Irvine, CA, USA
- **Program Co-Chair - Main organizer** of the 13th IEEE International Conference on Semantic Computing (IEEE ICSC 2020), Newport Beach, CA, USA
- **Program Co-Chair** of the 4th IEEE International Conference on Robotic Computing, Taichung, Taiwan, 2020
- **Program Co-Chair and Main Organizer** of the 4th International Workshop on Semantic Robotics (SR 2020), Virtual

2019

- **Program Co-Chair** of the First IEEE International Conference on Conversational Data & Knowledge Engineering, Dec 9-11, San Diego, 2019
- **Demo track Pc Member**, Web Intelligence, Thessaloniki, Greece, 2019
- **Program Co-Chair and Local Main Organizer** of the 3rd IEEE International Conference on Robotic Computing (IEEE IRC 2019), Napoli, Italy
- **Program Co-Chair and Main Organizer** of the 3th International Workshop on Semantic Robotics (SR 2019), Newport Beach, CA, USA
- **Program Committee** of the 5th International Workshop on Collaboration for Humans, Agents, Robots, Machines and Sensors (CHARMS 2018), Napoli, Italy
- **Workshop and Special Session Committee Co-Chairs** of the 13th IEEE International Conference on Semantic Computing (IEEE ICSC 2019), Newport Beach, CA, USA
- **Program Co-Chair** of the Second International Workshop on Semantic Multimedia Computing (SMC 2019), Newport Beach, CA, USA

2018

- **Program Co-Chair and Main Organizer** of the First IEEE International Conference on Artificial Intelligence for Industries (IEEE AI4I 2018), Laguna Hills, CA, USA
- **Member of the Organizing Committee** of the Second IEEE International Conference on Robotic Computing (IEEE IRC 2018), Laguna Hills, CA, USA
- **Member of the Organizing Committee** of the 2nd International Workshop on Application of Semantic Web technologies in Robotics, AnSWer 2018, Monterey, CA, USA
- **Program Committee** of the 4th International Workshop on Collaboration for Humans, Agents, Robots, Machines and Sensors (CHARMS 2018), Laguna Hills, CA, USA
- **Tutorial Committee Co-Chair** of the 2018 IEEE Second International Conference on Robotic Computing, Laguna Hills, CA, USA
- **Program Co-Chair and Main Organizer** of the Second International Workshop on New Frontiers in Computational Robotics (NFCR 2018), Laguna Hills, CA, USA
- **Member of the Organizing Committee** of the 12th IEEE International Conference on Semantic Computing (IEEE ICSC 2018), Laguna Hills, CA, USA
- **Program Co-Chair and Main Organizer** of the Second International Workshop on Semantic Robotics (SR 2018), Laguna Hills, CA, USA
- **Program Co-Chair** of the Second International Workshop on Semantic Multimedia Computing (SMC 2018), Laguna Hills, CA, USA

2017

- **Member of the Organizing Committee** of the First IEEE International Conference on Robotic Computing (IEEE IRC 2017), Taichung, Taiwan, (**co-founder of the conference**)
- **Program Co-Chair and Main Organizer** of the 11th IEEE International Conference on Semantic Computing (IEEE ICSC 2017), Laguna Hills, CA, USA

- *Program Committee* of the 3rd International Workshop on Collaboration for Humans, Agents, Robots, Machines and Sensors (CHARMS 2017), Taichung, Taiwan
- **Program Co-Chair and Main Organizer** of the Special Session on New frontiers in Computational Robotics - IEEE ICRC 2017, Taichung, Taiwan
- **Program Co-Chair and Main Organizer** of the 1st Workshop on Robotic Medical Devices and Semantic Systems (RMDSS 2017), Taichung, Taiwan
- *Tutorial Committee Chair* of the 2017 IEEE First International Conference on Robotic Computing, Taichung, Taiwan
- **Program Co-Chair and Main Organizer** of the First International Workshop on Semantic Robotics (SR 2017), San Diego, CA, USA
- *Program Co-Chair* of the First International Workshop on Semantic Multimedia Computing (SMC 2017), San Diego, CA, USA
- **Program Co-Chair and Main Organizer** of the First International Workshop on New Frontiers in Computational Robotics (NFCR 2017), Taichung, Taiwan
- *Member of the Organizing Committee* of the 2nd International Workshop on Application of Semantic Web technologies in Robotics, AnSWeR 2017, Portoroz, Slovenia

2016

- *Member of the Organizing Committee* of the First Workshop on Behavior Adaptation, Interaction and Learning for Assistive Robotics – BAILAR 2016, NYC, USA

2015

- *PC Member* of the 3rd International Workshop on Cloud and Distributed System Applications (CADSA), within the 10th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing 2015, Krakow, Poland

2014

- *PC Member* of the 2nd International Workshop on Cloud and Distributed System Applications (CADSA), within the 9th International Conference on P2P, Parallel, Grid, Cloud and Internet Computing 2014, Guangdong, China

2011

- **Exhibition:** *D. D'Auria*, “Nuova Frontiera della Robotica: Interazione e Cooperazione con l’Uomo”, Mostra: Donne e Scienza, March 2011, Città della Scienza, Napoli

3.4.3 Reviewing Activities

Reviewer activity for journals:

- Applied Sciences, Actuators, Transaction on cloud Computing, Journal of Motor Behavior, International Journal of Semantic Computing, Encyclopedia with Semantic Computing and Robotic Computing.

Reviewer activity for projects:

- European Commission for evaluation of proposals submitted to KDT JU 2023 and Chips JU 2024;
- European Commission Proposal for the Marie Skłodowska-Curie Action Individual Fellowships (European Commission Horizon 2020).

Reviewer activity for conferences:

- IEEE ICSC 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024; IEEE IRC 2017, 2018, 2019, 2020, 2021, 2022, 2023; IEEE CDKE 2019; ACM WI 2019; IEEE ai4i 2018, 2019, 2020, 2021, 2022, 2023; SMC 2017, 2018, 2019, 2020, 2021, 2022, 2023; SR 2017, 2018, 2019, 2020, 2021; CHARMS 2017, 2018, 2019, 2020, 2021, 2022, 2023; NFCR 2017, 2018, 2019, 2020, 2021, 2022, 2024; PAAMS 2019, 2020, 2021, 2022, 2023; AnSWeR 2017, 2018, 20; RMDSS 2017; IEA/AIE 2016; BAILAR 2016; CADSA 2015.

3.5 Scientific presentations, tutorials, seminars, and awards for research activities

3.5.1 Presentations at Conferences

2023

- F Persia and D. D'Auria, Information Retrieval from Facebook for Social Network Analysis, *2023 IEEE ICSC, Laguna Hills, CA, USA.*

2022

- D D'Auria, F Persia, Privacy Protection and Regulatory Aspects in the context of Medical Apps, *2022 IEEE IRC, Naples, Italy.*

2021

- D D'Auria, F Persia, Robots against the Coronavirus: the need for a new generation of robots to help global society, *2021 IEEE 15th International Conference on Semantic Computing (ICSC), virtual.*

2020

- F Persia, D D'Auria, G Pilato, Fast Learning and Prediction of Event Sequences in a Robotic System, *2020 Fourth IEEE International Conference on Robotic Computing (IRC), virtual.*
- JR Barr, D. D'Auria, F. Persia, Telemedicine, Homecare in the Era of COVID-19 & Beyond, *2020 IEEE Third International Conference on Artificial Intelligence for Industries (AI4I), virtual.*

2019

- D. D'Auria, F. Persia, F. Bettini, S. Helmer, Predicting and Preventing Dangerous Events via Video Surveillance Using a Robotic Platform, *2019 Third IEEE International Conference on Robotic Computing (IEEE IRC 2019), Naples, Italy*

2018

- D. D'Auria, F. Persia, Design of a Framework allowing Researchers to Optimize their Academic Evaluation. In the First IEEE International Conference on Artificial Intelligence for Industries (IEEE ai4i 2018), Laguna Hills, California, September 26-28, 2018
- D. D'Auria, Persia F, F. Bettini, S. Helmer, B. Siciliano, SARRI: a SmArt Rapiro Robot Integrating a framework for automatic high-level surveillance event detection. In: 2018 Second IEEE International Conference on Robotic Computing (IRC). IEEE, Laguna Hills, USA, 2018

2017

- D'Auria D, Persia F (2017). The Role of Semantics in Improving Medical Doctors' Performance. In: 2017 First IEEE International Conference on Robotic Computing (IRC). IEEE, Taichung, Taiwan 10.4.2017 - 12.4.2017.
- Fabio Persia, Daniela D'Auria, A Survey of Online Social Networks: Challenges and Opportunities, IEEE Information Reuse and Integration (IRI), San Diego, USA, 2017

2016

- D. D'Auria, G. Ristorto, R. Gallo and F. Mazzetto, Tracked robot over a slope path: Dynamic stability control, 2016 IEEE IRI 2016, Pittsburgh, USA, July 2016
- D. D'Auria, G. Ristorto and F. Mazzetto, Development and Preliminary Test of a Mobile Lab for the orchard crop monitoring, MECHTECH 2016 Conference, Alghero, Italy, May 2016
- D. D'Auria, F. Persia, B. Siciliano, Human-computer interaction in healthcare: How to support patients during their wrist rehabilitation, 2016 IEEE International Conference on Semantic Computing, Laguna Hills, CA, Feb. 2016

2015

- D. D'Auria, F. Persia, B. Siciliano, A Low-Cost Haptic System for Wrist Rehabilitation IEEE IRI 2015, San Francisco, USA, August 13-15, 2015

2014

- D. D'Auria, D. Di Mauro, D. Calandra, and F. Cutugno, Interactive Headphones for a Cloud 3D Audio Application, 3PGCIC, Guangzhou, China, Nov. 2014
- D. D'Auria, D. Di Mauro, D. Calandra, and F. Cutugno, Caruso: Interactive Headphones for a Dynamic 3D Audio Application in the Cultural Heritage Context, IEEE IRI, San Francisco, CA, Aug. 2014
- F. Persia and D. D'Auria, Automatic Evaluation of Medical Doctors' Performances while Using a Cricothyrotomy Simulator, IEEE IRI, San Francisco, CA, Aug. 2014
- Daniela D'Auria, Fabio Persia, Discovering expected activities in medical context scientific databases, Proceedings of 3rd International Conference on Data Management Technologies and Applications, DATA 2014, Vienna

2012

- L. White, D. D'Auria, R. Bly, P. Bartell, N. Aghdasi, C. Jones, B. Hannaford, Cricothyrotomy Simulator Training for the Developing Word, IEEE Global Humanitarian Technology (GHTC), Seattle, WA, Oct. 2012

3.5.2 *Invited Talks and Seminars*

- *Seminar: D. D'Auria*, “Applications of AI in the medical field”, Department of Computer Science, University of Verona, February 2023
- *Seminar: D. D'Auria*, “From video surveillance to medicine: some recent robotic applications” Department of Information Engineering, University of Brescia, February 2023
- *Invited Talk: D. D'Auria*, “A Smart Ecosystem to improve Patient Monitoring using Wearables, Intelligent Agents, Complex Event Processing and Image Processing”, SMMHe '23 (Smart Media and Mobile Health), CNR, Milano, January 2023
- *Invited Talk: D. D'Auria*, “reCOVeryaID - an application for telemedicine: system architecture and results”, International Medical Informatics and Telemedicine Conference, ITIM 2022, NOI Techpark Bolzano, December 2022
- *Invited Talk: D. D'Auria*, A smart robot integrating a framework for automatic high-level surveillance event detection, November 2018, AlmageLab, Unimore, Modena, Italy
- *Invited Talk: D. D'Auria*, “SARRI, a SmArT Rapiro Robot Integrating a framework for automatic high-level surveillance event detection”, Second International Workshop on Semantic Multimedia Computing (SMC '18), in conjunction with the 12th IEEE International Conference on Semantic Computing (IEEE ICSC 2018), February 2, 2018, Laguna Hills, California, USA
- *Invited talk: D. D'Auria*, “Introduction to a Phd School about Semantics in Robotics”, Liceo “Cantore” Brunico, 2017
- *Seminar: D. D'Auria*, “Surgical robotics”, May 2014, INRIA Sophia Antipolis, Nice, France
- *Seminar: D. D'Auria*, “A new surgeon simulator”, September 2013, LIRMM, CNRS, Montpellier University, Montpellier, France
- *Seminar: D. D'Auria*, “Using 3D Prototyping systems to create Smart and Low-Cost Robotic Devices”, Dipartimento di Ingegneria Elettrica e Tecnologie dell'Informazione, Università degli studi di Napoli “Federico II”, January 2013
- *Seminar: D. D'Auria*, “A low cost surgical simulator and a new uterine manipulator”, October 2012, Center for Computer Science and Engineering, Seattle, USA
- *Seminar: D. D'Auria*, “Medical Simulator: a new tool for training and skill assessment”, October 2012, Center for Computer Science and Engineering, Seattle, USA

3.6 *Teaching and supervision activities at the University level*

3.6.1 *Teaching activities - University level*

During the below mentioned teaching activities at the University, I carried out several lessons both theoretical and practical, giving also personal didactic assistance to the students.

- Teaching assistant of the course “Databases”, offered by the University of Milano-Bicocca, Bachelor degree, CFU: 8, A.A 2023/2024;
- Teaching assistant of the course “Advanced Human Computer Interaction”, offered by the University of Trento, Master degree, CFU: 6, A.A 2022/2023;
- Teacher of the course “An Introduction to Artificial Intelligence”, in collaboration with Prof. Diego Calvanese, offered by the Free University of Bozen-Bolzano; A.A. 2020-2021;
- Teaching assistant at the “Operating Systems” course of the Bachelor in Computer Science offered by the Free University of Bozen-Bolzano, focusing on C programming in Linux environment; CFU: 6, A.A. 2018-2019; A.A. 2019-2020.

Ongoing Activities:

- Teacher of the “Medical Robotics” course at the PhD Program in Engineering and Computer Science at the Department of Information Engineering, Computer Science and Mathematic at the University of L'Aquila. A.A. 2023/2024.

3.6.2 *Supervision activities - University level*

My supervision activity has led to the realization of a number of interesting applications in the robotic and computer engineering fields with both experimental work in laboratory and theoretical/simulation studies. I have supervised several students and the following are those for the last Academic Year.

Faculty of Computer Science University of Milano-Bicocca:

- I was the supervisor of 1 Master student from the Faculty of Computer Science for a thesis on design and implementation of a teleoperation system for a robotic arm through wearable inertial sensors, A.A. 2023/2024;

Faculty of Engineering (department of computer science), Free University of Bozen-Bolzano:

- I was the main supervisor of 1 Bachelor student from the Faculty of Engineering for internship and thesis on the ARTERY European Project about “*Sensorization techniques of a transesophageal ultrasound probe for early detection of overheating during clinical procedures*”. Joint thesis with the Institute of Biorobotics at Sant'Anna University of Pisa. A.A. 2023/2024;

University of Auckland, Faculty of Science, School of Computer Science

- I was the examiner for Ganesh Selvaraj's *doctoral dissertation* “Cost-Based Optimization of SPARQL Queries” at the University of Auckland, 2023, (<https://researchspace.auckland.ac.nz/handle/2292/20031>).

3.6.3 *Memberships*

- **Chair of the IEEE Technical Committee on Semantic Computing** (IEEE TCSEM), since 2022 - today, (<https://www.computer.org/communities/technical-committees/tcsem>)
- Member of the “Laboratorio Nazionale Digital Health CINI”, since 2021 – today
- Member of the “Ordine degli Ingegneri della Provincia di Napoli”, since 2009 - today
- Member of the Editorial Board of the Encyclopedia with Semantic Computing and Robotic Intelligence, since 2016 – today
- Member of the Editorial board di IJSC (International Journal of Semantic Computing), since 2016 - today
- Member of the GIRPR (Gruppo Italiano Ricercatori in Pattern Recognition), since 2016 - 2018
- Member of the IEEE-Robotic and Automation Society (RAS), since 2015 - 2018
- Member of the institute of Electrical and Electronics Engineers (IEEE), since 2010 – 2018

4. DETAILED PUBLICATION LIST

4.1 *International Academic Referred Journal*

2024

[J-20] D. D'Auria, F. Bettini, S. Tognarelli, D. Calvanese, A. Menciassi, Technologies and Main Functionalities of the Telemonitoring Application reCOVeryaID, *Frontiers in Big Data*, 2024.

2023

[J-19] G. Pilato, F. Persia, M. Ge Mouzhi and T. Chondrogiannis and D. D'Auria, A Modular Social Sensing System for Personalized Orienteering in the COVID-19 Era, *ACM Transactions on Management Information Systems*, 2023.

[J-18] A.K. Saxena, R. Borgogni, M. Escolino, D. D'Auria, C. Esposito. Narrative review: robotic pediatric surgery-current status and future perspectives. *Translational Pediatric*, 2023.

[J-17] D. D'Auria, R. Russo, F. Fedele, A. Addabbo, D. Calvanese, An intelligent telemonitoring application for coronavirus patients: reCOVVeryaID, *Frontiers in Big Data*, 2023.

[J-16] C. M. Bertocelli, S. Costantini, F. Persia, D. Bertocelli, D. D'Auria. PredictMed-Epilepsy: A Multi-agent based System for Epilepsy, accepted for publication on the *Computer Methods and Programs in Biomedicine* journal, 2023.

[J-15] L. De Lauretis, F. Persia, S. Costantini, D. D'Auria, How to leverage Intelligent Agents and Complex Event Processing to improve Patient Monitoring, *Journal of Logic and Computation*, exad016, <https://doi.org/10.1093/logcom/exad016>, 28 March 2023.

[J-14] C. Esposito, M. Cerulo, B. Lepore, V. Coppola, D. D'Auria, G. Esposito, R. Carulli, F. Del Conte, M. Escolino, Robotic-assisted pyloplasty in children: a systematic review of the literature, *Journal of Robotic Surgery*, 2023.

[J-13] D. D'Auria, V. Moscato, M. Postiglione, G. Romito, G. Sperli, Improving graph embeddings via entity linking: A case study on Italian clinical notes, *Intelligent Systems with Applications*, Volume 17, 2023, 200161, ISSN 2667-3053, <https://doi.org/10.1016/j.iswa.2022.200161>.

2022

[J-12] G. Pilato, F. Persia, M. Ge and D. D'Auria, "Social Sensing for Personalized Orienteering Mediating the Need for Sociality and the Risk of COVID-19," in *IEEE Transactions on Technology and Society*, vol. 3, no. 4, pp. 323-332, Dec. 2022, <https://doi.org/10.1109/TTS.2022.3210882>.

2020

[J-11] F. Persia, G. Pilato, M. Ge, P. Bolzoni, D. D'Auria, S. Helmer, Improving orienteering-based tourist trip planning with social sensing, *Future Generation Computer Systems*, Volume 110, 2020, Pages 931-945, ISSN 0167-739X, <https://doi.org/10.1016/j.future.2019.10.028>.

2018

[J-10] D. D'Auria, F. Persia, A Methodology for Improving Vegetation Representation and Health Exploiting a Semantic Robotic System and Its Dynamic Stability Control, *International Journal of Semantic Computing (IJSC)*, 12 (01), 25-41, (2018).

2017

[J-9] R. Russo, D. D'Auria, M. Ciccarelli, G. Della Rotonda, G. D'Elia, B. Siciliano, Triangular block bridge method for surgical treatment of complex proximal humeral fractures: theoretical concept, surgical technique and clinical results, *Injury*, 2017, Volume 48, S12 - S19.

[J-8] F. Persia, D. D'Auria, High-level surveillance event detection, *Encyclopedia with Semantic Computing and Robotic Intelligence 2017*.

[J-7] D. D'Auria and F. Persia, Use of semantics in robotics - improving doctors' performance using a cricothyrotomy simulator, *Encyclopedia with Semantic Computing and Robotic Intelligence*, 2017.

2016

[J-6] D. D'Auria, G. Ristorto, F. Persia, R. Vidoni and F. Mazzetto, Development and preliminary tests of a Crop Monitoring Mobile Lab based on a combined use of Optical Sensors, *International Journal of Computer & Software Engineering*, 2016.

2015

[J-5] D. D'Auria, D. Di Mauro, D. Calandra, and F. Cutugno, A 3D Audio Augmented Reality System for a Cultural Heritage Management and Fruition, *Journal of Digital Information Management*, 2015.

[J-4] D. Calandra, D. Di Mauro, D. D'Auria, F. Cutugno, E.Y.E.C.U.: an Emotional eYe trackEr for Cultural heritage sSupport, *Empowering Organizations: Enabling Platforms and Artefacts*, Springer, 2015.

[J-3] F. Persia, D. D'Auria, G. Sperli and A. Tufano, A Prototype for Anomaly Detection in Video Surveillance Context Intelligent Software Methodologies, Tools and Techniques, Volume 532 of the series *Communications in Computer and Information Science*, pages 517-528, Springer, September 2015.

[J-2] *D.D'Auria* and F.Persia, A Framework for Real-Time Evaluation of Medical Doctors' Performances while Using a Cricothyrotomy Simulator, Communications in Computer and Information Science (CCIS) Series, Springer-Verlag 2015.

2013

[J-1] L. White, R. Bly, *D. D'Auria*, N. Aghdasi, P. Bartell, L. Cheng and B.Hannaford, Cricothyrotomy Simulator with Computational Skill Assessment for Procedural Skill Training in the Developing World, Journal of Otolaryngology - Head & Neck Surgery, BC, 2013.

4.2 Peer Reviewed International Conferences and Workshops with Formal Proceedings

2024

[C-35] A. Fornaro, D. D'Auria, H. Amrani. and P. Napoletano, Responsive Teleoperation of a Robotic Arm via Wearable Inertial Sensors, 2024 IEEE Gaming, Entertainment, and Media Conference (GEM), 2024.

[C-34] F. Persia, M. Ge, G. Pilato, D. D'Auria, A. Rafanelli, S. Costantini, G. De Gasperis, Leveraging DALI to Refine Route Planning by Dynamically Avoiding Risky POIs, IEEE 18th International Conference on Semantic Computing (ICSC), Laguna Hills, CA, USA, 2024.

2023

[C-33] F. Persia and D. D'Auria, Complex Event Processing in Heterogeneous Domains, IEEE International Symposium on Multimedia (ISM), Laguna Hills, CA, USA, 2023.

[C-32] M. Ge, G. Pilato, F. Persia, D. D'Auria, Recommender System for Social Media: Research Challenges and Future Applications, Fifth International Conference on Transdisciplinary AI (TransAI), 2023.

[C-31] F. Persia, *D. D'Auria*, Information Retrieval from Facebook for Social Network Analysis, 2023 IEEE 17th International Conference on Semantic Computing (ICSC), 329-336.

2022

[C-30] *D D'Auria*, F Persia, Privacy Protection and Regulatory Aspects in the context of Medical Apps, 2022 Sixth IEEE International Conference on Robotic Computing (IRC), 277-280.

2021

[C-29] F. Persia, S. Costantini, C. Ferri, L. De Lauretis, *D. D'Auria*, A Smart Framework for Automatically Analyzing Electrocardiograms, 2021 Third International Conference on Transdisciplinary AI (TransAI), virtual.

[C-28] *D D'Auria*, F Persia, Robots against the Coronavirus: the need for a new generation of robots to help global society, 2021 IEEE 15th International Conference on Semantic Computing (ICSC), virtual.

2020

[C-27] F Persia, *D D'Auria*, G Pilato, Fast Learning and Prediction of Event Sequences in a Robotic System, 2020 Fourth IEEE International Conference on Robotic Computing (IRC), virtual.

[C-26] JR Barr, *D. D'Auria*, F. Persia, Telemedicine, Homecare in the Era of COVID-19 & Beyond, 2020 IEEE Third International Conference on Artificial Intelligence for Industries (AI4I), virtual.

[C-25] F. Persia, *D. D'Auria*, M. Ge, Improving Learning System Performance with Multimedia Semantics, 2020 IEEE 14th International Conference on Semantic Computing (ICSC), virtual.

[C-24] F. Persia, *D. D'Auria*, G. Pilato, An Overview of Video Surveillance Approaches, 2020 IEEE 14th International Conference on Semantic Computing (ICSC), virtual.

2019

[C-23] *D. D'Auria*, F. Persia, F. Bettini, S. Helmer, Predicting and Preventing Dangerous Events via Video Surveillance Using a Robotic Platform, 2019 Third IEEE International Conference on Robotic Computing (IEEE IRC 2019), 549-554, (2019).

2018

[C-22] *D. D'Auria*, F. Persia, Design of a Framework allowing Researchers to Optimize their Academic Evaluation, In the First IEEE International Conference on Artificial Intelligence for Industries (IEEE ai4i 2018), Laguna Hills, California, September 26-28, 2018.

[C-21] F. Persia, M. Ge, *D. D'Auria*, How to Exploit Recommender Systems in Social Media. In the 2018 IEEE International Conference on Information Reuse and Integration (IEEE IRI 2018), pp. 537-541, 2018.

[C-20] *D. D'Auria*, F. Persia, F. Bettini, S. Helmer, B. Siciliano, SARRI: a SmArt Rapiro Robot Integrating a framework for automatic high-level surveillance event detection. In: 2018 Second IEEE International Conference on Robotic Computing (IRC). IEEE, Laguna Hills, USA, 2018.

2017

[C-19] *D. D'Auria*, F. Persia IEEE IRC 2017, The Role of Semantics in Improving Medical Doctors' Performance, IEEE IRC 2017, Taiwan.

[C-18] *D. D'Auria*, F. Persia, A collaborative robotic cyber physical system for surgery applications, IEEE Information Reuse and Integration (IRI) 2017, San Diego, USA.

[C-17] *D. D'Auria* and F. Persia, A Methodology for Improving Vegetation Representation and Health exploiting a Semantic Robotic System, 2017 IEEE 11th International Conference on Semantic Computing, San Diego, USA

[C-16] F. Persia, *D. D'Auria*, A Survey of Online Social Networks: Challenges and Opportunities, IEEE Information Reuse and Integration (IRI), San Diego, USA, 2017.

2016

[C-15] M. Bietresato, G. Carabin, *D. D'Auria*, R. Gallo, G. Ristorto, F. Mazzetto, R. Vidoni, A. Gasparetto and L. Scalera, A tracked mobile robotic lab for monitoring the plants volume and health, MESA 2016 - 12th IEEE/ASME International Conference on Mechatronic and Embedded Systems and Applications, Auckland, New Zealand, Aug 2016.

[C-14] *D. D'Auria*, G. Ristorto, R. Gallo and F. Mazzetto, Tracked robot over a slope path: Dynamic stability control, 2016 IEEE IRI 2016, Pittsburgh, USA, July 2016.

[C-13] *D. D'Auria*, G. Ristorto and F. Mazzetto, Development and Preliminary Test of a Mobile Lab for the orchard crop monitoring, MECHTECH 2016 Conference, Alghero, Italy, May 2016.

[C-12] *D. D'Auria*, F. Persia, B. Siciliano, Human-computer interaction in healthcare: How to support patients during their wrist rehabilitation, 2016 IEEE International Conference on Semantic Computing, Laguna Hills, CA, Feb. 2016.

2015

[C-11] *D. D'Auria*, F. Persia, B. Siciliano, A Low-Cost Haptic System for Wrist Rehabilitation IEEE IRI 2015, San Francisco, USA, August 13-15, 2015.

[C-10] *D. D'Auria*, F. Persia, A Distributed Framework for Event Detection in Video Surveillance Context, 3rd International Workshop on Cloud and Distributed System Applications, Poland, Nov. 2015.

[C-9] F.Persia, D.D'Auria, G.Sperli, and A.Tufano, A Prototype for Anomaly Detection in Video Surveillance Context, SoMeT 2015, Naples, Italy.

2014

[C-8] D. Calandra, D. Di Mauro, D. D'Auria, F. Cutugno, E.Y.E.C.U.: an Emotional eYe trackER for Cultural heritage sUpport, ItAIS 2014, Genova, Italy, Nov. 2014.

[C-7] D. D'Auria, D. Di Mauro, D. Calandra, and F. Cutugno, Interactive Headphones for a Cloud 3D Audio Application, 3PGCIC, Guangzhou, China, Nov. 2014.

[C-6] F. Persia and D. D'Auria, An application for finding expected activities in medical context scientific databases, SEBD, Sorrento Coast, IT, June 2014.

[C-5] D. D'Auria, D. Di Mauro, D. Calandra, and F. Cutugno, Caruso: Interactive Headphones for a Dynamic 3D Audio Application in the Cultural Heritage Context, IEEE IRI, San Francisco, CA, Aug. 2014.

[C-4] F. Persia and D. D'Auria, Automatic Evaluation of Medical Doctors' Performances while Using a Cricothyrotomy Simulator, IEEE IRI, San Francisco, CA, Aug. 2014.

[C-3] F. Barile, D. Calandra, A. Caso, D. D'Auria, D. Di Mauro, F. Cutugno, S. Rossi, ICT solutions for the OR. C. HE. STRA project: from personalized selection to enhanced fruition of cultural heritage data, The 10th International Conference on Signal Image Technology & Internet Systems, 2014, Marocco.

[C-2] D. D'Auria, F. Persia, Discovering expected activities in medical context scientific databases, Proceedings of 3rd International Conference on Data Management Technologies and Applications, DATA 2014, Vienna.

2012

[C-1] L. White, D. D'Auria, R. Bly, P. Bartell, N. Aghdasi, C. Jones, B. Hannaford, Cricothyrotomy Simulator Training for the Developing Word, GHTC 2012, Seattle, WA, Oct. 2012.

4.3 Theses

[T-1] D. D'Auria, Design and Development of a Robotic Surgery Device and a Medical Simulator, PhD Thesis, Dipartimento di Ingegneria Elettrica e Tecnologie dell'Informazione (DIETI), Università degli studi di Napoli "Federico II", 2013.

4.4 Publication on magazines and television interviews

- Published by: Academia, 10 January 2016 - Technology, "Supercontadino 2.0".
<http://www.academia.bz.it/photos/supercontadino-2-0>
- Sarah Franzosini - Salto.bz, L'app che aiuta i medici, 9.11.2020,
<https://www.salto.bz/de/article/09112020/lapp-che-aiuta-i-medici>
- Arturo Zilli -Unibz.it, 5.11.2020, Monitorare la salute dei pazienti Covid-19 a casa? Si può con reCOVeraID,
<https://www.unibz.it/it/news/136719-monitorare-la-salute-dei-pazienti-covid-19-a-casa-si-puo-con-recoveryaid>
- altoadigeinnovazione.it, 16.10.20, <https://www.altoadigeinnovazione.it/e-health-lintelligenza-artificiale-al-servizio-della-sanita-altoatesina-ecco-il-workshop-al-noi/>
- Vanity Fair (sezione Salute) – Simone Cosimi, 6.11.2020, Telemedicina, ecco la piattaforma per aiutare i medici di base ai tempi del Covid, <https://www.vanityfair.it/benessere/salute-e-prevenzione/2020/11/06/covid-telemedicina-piattaforma-aiuto-medici-di-base>

- Vicky Rabensteiner, Academia, 9.11.2020, Gesundheitsüberwachung von Covid-19-Patienten mit der Applikation reCOVeraID, <https://www.academia.bz.it/articles/gesundheitsueberwachung-von-covid-19-patienten-mit-der-applikation-recoveryaid>
- Redazione 2, Il Fatto Nisseno, 9.11.2020, Covid, reCOVeraID: l'app per monitorare i pazienti a casa, <https://www.ilfattonisseno.it/2020/11/covid-recoveryaid-lapp-per-monitorare-i-pazienti-a-casa/>
- Alberto di Capua, Vivere Senigallia, 16.11.2020, <https://www.viveresenigallia.it/2020/11/17/recoveryaid-una-app-per-monitorare-il-decorso-del-covid-19/857499>
- <https://www.youtube.com/watch?v=YZxeNc2yIpA>
- Arturo Zilli, Science South Tyrol, 5.11.2020, <https://www.sciencesouthtyrol.net/Pages/Details/News.aspx?id=136719&si=UNIBZ&i=UNIBZ&t=2&d=-1&s=3&w=5747>
- Sudtiroler Wirtschaftszeitung, Entlastung für Gesundheitssystem durch neue unibz-App 13.11.2020, <https://swz.it/entlastung-fuer-gesundheitssystem-durch-neue-unibz-app/>
- Marco Passarello, Una app per assistere a distanza i malati Covid, 11.11.2020, <https://www.rainews.it/tgr/bolzano/video/2020/11/blz-app-assistenza-distanza-malati-Covid-UniBZ-e44bad92-d471-409e-87cf-d78cef6973ec.html>
- Sudtirol News, 9.11.2020, Gesundheitsüberwachung von Covid-19-Patienten App der Uni Bozen könnte Krankenhäuser entlasten, <https://www.suedtirolnews.it/chronik/app-der-uni-bozen-koennte-krankenhaeuser-entlasten-video>
- Rocco Leo, Corriere dell'Alto Adige, 11.11.2020, I malati a casa monitorati con una app, <https://www.pressreader.com/italy/corriere-dellalto-adige/20201111/281530818549280>
- 16.11.2020, Stol.it, Covid-Patienten aus der Ferne im Blick, <https://www.stol.it/artikel/chronik/covid-patienten-aus-ferne-im-blick>
- 6.11.2020, Informazione.it, <https://www.informazione.it/a/CBC3D893-C919-4E0F-93DD-306ADFEFF3EC/MONITORARE-LA-SALUTE-DEI-PAZIENTI-COVID-19-NON-SERVE-L-OSPEDALE-SE-C-e-RECOVERYAID>
- Agora news, 5.11.2020, <https://www.agoranews.it/monitorare-la-salute-dei-pazienti-covid-19-non-serve-lospedale-se-ce-recoveryaid.html>
- Alto Adige Innovazione, 10.11.2020, L'app per monitorare i pazienti Covid da casa, <https://www.altoadigeinnovazione.it/app-covid/>
- 16.11.2020, Geos news, https://it.geosnews.com/p/it/marche/an/senigallia/recoveryaid-una-app-per-monitorare-il-decorso-del-covid-19_31645943
- 10.11.2020, Video 33, <https://www.video33.it/2020/11/10/pazienti-covid-a-casa-monitorati-da-una-app/>
- 6.11.2020, Rassegna stampa con me - https://www.ospedalirionitipalermo.it/files/allegati/202011061006260.Rassegna_Stampa_6_novembre_2020.pdf
- Sunshine.it, 9.11.2020, <https://www.sunshine.it/gesundheitsueberwachung-von-covid-19-patienten-applikation-recoveryaid-der-unibz-koennte-krankenhaeuser-entlasten/>
- 17.11.2020, Salto.bz, E l'Asl ignora l'app aiuta-medici, <https://www.salto.bz/it/article/17112020/e-lasl-ignora-lapp-aiuta-medici>
- Impresa sanità, 10.11.2020, <https://www.impresasanita.it/it/articles/20201108/assistenza-medica-da-remoto-con-recoveryaid>

- Nicoletta Cocco, in salute news, 06.11.2020, <https://www.insalutenews.it/in-salute/come-monitorare-la-salute-dei-pazienti-covid-ecco-la-app-che-controlla-da-remoto-il-decorso-dellinfezione/>
- 5.11.2020, Monitorare la salute dei pazienti Covid-19? Non serve l'ospedale se c'è reCOVeraID, <https://www.politicamentecorretto.com/2020/11/05/monitorare-la-salute-dei-pazienti-covid-19-non-serve-lospedale-se-ce-recoveryaid/>
- IDW, Gesundheitsüberwachung von Covid-19-Patienten: Applikation reCOVeraID der unibz könnte Krankenhäuser entlasten, <https://idw-online.de/en/image342371>
- Science – Medizin & Biotech, Gesundheitsüberwachung von Covid-19-Patienten: Applikation reCOVeraID der unibz könnte Krankenhäuser entlasten, https://science.apa.at/rubrik/medizin_und_biotech/Gesundheitsueberwachung_von_Covid-19-Patienten_Applikation_reCOVeraID_der_unibz_koennte_Krankenhaeuser_entlasten/SCI_20201109_SCI394_51352257421056
- Progress 21.11.2020 – Parte 4 – Innovation, SkyTg24, <https://video.sky.it/news/tecnologia/video/progress-21112020-parte-4-innovation-631050>, Daniela D'Auria, Sanità Digitale – reCOVeraID
- 18.11.2020, #Tecnologia Monitorare la salute dei pazienti Covid-19? Non serve l'ospedale se c'è #reCOVeraID, <https://www.diocesisenigallia.eu/radiogiornale-di-mercoledi-di-18-novembre-2020-6948/>, Radiogiornale di mercoledì di 18 novembre 2020, Radio Duomo – Senigallia
- 5.01.2021, Noi magazine, Covid-19: arriva l'app che aiuta medici e ospedali, <https://noi.bz.it/it/magazine-innovazione/covid-19-arriva-lapp-che-aiuta-medici-e-ospedali>
- 16/01/2021, Monitorare la salute dei pazienti CoViD-19? Non serve l'ospedale se c'è reCOVeraID, Magazine "la Protezione Civile Italia" da pag 78 a pag 80.
- RAI UNO MATTINA, 05/05/2021 <https://www.raiplay.it/video/2021/04/Unomattina-0811a04c-160f-472c-9722-b63f0e272761.html> - reCOVeraID telemedicine application (NOI Techpark, Free University of Bozen-Bolzano)
- 22/12/22, UNIBZ NEWS, <https://www.unibz.it/it/home/newsroom/news/daniela-dauria-awarded-at-the-6th-edition-of-the-ieee-irc>

5. LANGUAGE COMPETENCE

- **Italian** (Mother Tongue)
- **English:** C1
- **French:** B2
- **German:** A2

Everything stated is true in accordance with Articles 46 and 47 of Presidential Decree 445/2000.

Date

18/07/2024