

## **ALLEGATO B**

UNIVERSITÀ DEGLI STUDI DI MILANO  
selezione pubblica per n.2 posti di Ricercatore a tempo determinato in tenure track (RTT)  
per il settore concorsuale 01/B1 ,  
settore scientifico-disciplinare INF/01  
presso il Dipartimento di Informatica Giovanni Degli Antoni,  
(avviso bando pubblicato sulla G.U. n. 41 del 21/05/2024) Codice concorso 5550

## **Daniela D'Auria** **CURRICULUM VITAE**

(N.B. IL CURRICULUM NON DEVE ECCEDERE LE 30 PAGINE E DEVE CONTENERE GLI ELEMENTI CHE IL CANDIDATO RITIENE UTILI AI FINI DELLA VALUTAZIONE.

LE VOCI INSERITE NEL FACSIMILE SONO A TITOLO PURAMENTE ESEMPLIFICATIVO E POSSONO ESSERE SOSTITUITE, MODIFICATE O INTEGRATE)

### **INFORMAZIONI PERSONALI (NON INSERIRE INDIRIZZO PRIVATO E TELEFONO FISSO O CELLULARE)**

COGNOME	D'AURIA
NOME	DANIELA
DATA DI NASCITA	04/11/1983

### **TITOLI**

#### **TITOLO DI STUDIO**

(indicare la Laurea conseguita inserendo titolo, Ateneo, data di conseguimento, ecc.)

- Laurea Specialistica in Ingegneria Biomedica, Università degli Studi di Napoli Federico II, maggio 2009-

#### **TITOLO DI DOTTORE DI RICERCA O EQUIVALENTI, OVVERO, PER I SETTORI INTERESSATI, DEL DIPLOMA DI SPECIALIZZAZIONE MEDICA O EQUIVALENTE, CONSEGUITO IN ITALIA O ALL'ESTERO**

(inserire titolo, ente, data di conseguimento, ecc.)

- Dottorato di Ricerca in Ingegneria Informatica e Automatica, Dipartimento di Ingegneria Elettrica e delle Tecnologie dell'Informazione - Università Degli Studi di Napoli Federico II

#### **CONTRATTI DI RICERCA, ASSEGNI DI RICERCA O EQUIVALENTI**

(per ciascun contratto stipulato, inserire università/ente, data di inizio e fine, ecc.)

- RTD/A presso il Dipartimento di Informatica, Sistemistica E Comunicazione dell'Università degli Studi di Milano-Bicocca, INF/01, dal 01/01/2024 al 31/12/2026.
- Assegnista di Ricerca presso la Facoltà di Ingegneria della Libera Università di Bolzano, ING-INF/05, dal 15/08/2023 al 31/12/2023.
- RTD/A presso la Facoltà di Scienze e Tecnologie Informatiche della Libera Università di Bolzano, ING-INF/05, dal 01/03/2020 al 06/08/2023.

- Assegnista di Ricerca presso la Facoltà di Scienze e Tecnologie della Libera Università di Bolzano, dal 01/11/2015 al 31/10/2016.
- Assegnista di Ricerca presso la Facoltà di Scienze e Tecnologie della Libera Università di Bolzano, dal 01/09/2015 al 31/10/2015.
- Borsista di Ricerca presso il Dipartimento di Ingegneria Elettrica e delle Tecnologie dell'Informazione dell'Università Degli Studi di Napoli Federico II, dal 01/03/2014 al 31/08/2015.
- PhD Visiting Scholar presso la University of Washington, Seattle, USA, dal 15/09/2011 al 01/11/2012.

#### **ATTIVITÀ DIDATTICA A LIVELLO UNIVERSITARIO IN ITALIA O ALL'ESTERO**

*(inserire periodo [gg/mm/aa inizio e fine], anno accademico, ateneo, corso laurea, numero ore, ecc.)*

Durante le attività didattiche di seguito elencate presso l'Università, ho svolto diverse lezioni sia teoriche che pratiche, fornendo anche assistenza didattica personale agli studenti.

- Docente del corso "Introduzione all'intelligenza artificiale", in collaborazione con il Prof. Diego Calvanese, offerto dalla Libera Università di Bolzano, 2021 - 2023.
- Assistente all'insegnamento del corso di Sistemi Operativi del Corso di Laurea in Informatica offerto dalla Libera Università di Bolzano, incentrato sulla programmazione C in ambiente Linux, Anni Accademici 2018/2019 e 2019/2020.

Attività in corso:

- Docente della seconda parte del corso "Basi di dati", offerto dall'Università di Milano-Bicocca, Anno accademico 2023/2024 - secondo semestre, laurea Triennale
- Teaching assistant del corso "Advanced Human Computer Interaction", offerto dalla University of Trento, Academic Year 2022/2023 - second semester, master degree
- Docente del corso "Robotica medica" presso il Dottorato di ricerca in Ingegneria e Informatica del Dipartimento di Ingegneria dell'Informazione, Informatica e Matematica dell'Università dell'Aquila Anno accademico 2022/2023
- Seminario di 10 ore dal titolo "Introduzione alla robotica nel contesto medico" nell'ambito del corso di laurea triennale in Informatica sanitaria e del corso di laurea magistrale in Sanità digitale presso l'Istituto di tecnologia di Deggendorf in Germania, luglio 2023.
- Docente della seconda parte del corso "Basi di dati", offerto dall'Università di Milano-Bicocca, Anno accademico 2023/2024 - secondo semestre, laurea Triennale
- Teaching assistant del corso "Advanced Human Computer Interaction", offerto dalla University of Trento, Academic Year 2022/2023 - second semester, master degree
- Docente del corso "Robotica medica" presso il Dottorato di ricerca in Ingegneria e Informatica del Dipartimento di Ingegneria dell'Informazione, Informatica e Matematica dell'Università dell'Aquila Anno accademico 2022/2023
- Seminario di 10 ore dal titolo "Introduzione alla robotica nel contesto medico" nell'ambito del corso di laurea triennale in Informatica sanitaria e del corso di laurea magistrale in Sanità digitale presso l'Istituto di tecnologia di Deggendorf in Germania, luglio 2023.

**DOCUMENTATA ATTIVITÀ DI FORMAZIONE O DI RICERCA PRESSO QUALIFICATI ISTITUTI ITALIANI O**

**STRANIERI;**

(inserire anno accademico, ente, corso, periodo, ecc.)

- Dal 2024/Gen -> 2026/Dic: RTD/A, INF/01, presso il Dipartimento di Informatica, Sistemistica E Comunicazione dell'Università degli Studi di Milano-Bicocca.
- Dal 2023/Ag -> 2023/Dic: AR, ING-INF/05, presso la Facoltà di Ingegneria della Libera Università di Bolzano, ITALIA, sotto la supervisione del Prof. Diego Calvanese.
- Dal 2020/mar -> 2023/ag: RTD/A, ING-INF/05, presso la Facoltà di Informatica della Libera Università di Bolzano, ITALIA, sotto la supervisione del Prof. Diego Calvanese.
- Dal 2015/Nov al 2016/Ott: AR presso la Facoltà di Scienze e Tecnologie della Libera Università di Bolzano, ITALIA.
- Dal 2015/Set al 2015/Ott: AR presso la Facoltà di Scienze e Tecnologie della Libera Università di Bolzano, ITALIA.
- Dal 2014/Mar al 2015/Aug: borsa di ricerca post-doc (borsa post-dottorato ai sensi della legge 30 novembre 1989 n. 398) presso il Dipartimento di Ingegneria Elettrica e Informatica dell'Università di Napoli Federico II, ITALIA.
- Dal 2011/Set al 2012/Nov: PhD Visiting Scholar presso il Laboratorio di BioRobotica dell'Università di Washington a Seattle, USA, guidato dal Prof. Blake Hannaford.

**DOCUMENTATA ATTIVITÀ IN CAMPO CLINICO**

(indicare, data, durata, ruolo, ente presso il quale si è prestata attività assistenziale, ecc.)

- Dottorato in Ingegneria Informatica e Automatica. In particolare, mi sono concentrata su diverse applicazioni nel contesto sanitario. Supervisor: Prof. Bruno Siciliano e Prof. Blake Hannaford.
- Collaborazione con il gruppo diretto dal Prof. Ciro Esposito, Professore Ordinario di Chirurgia Pediatrica presso l'Università di Napoli Federico II. In particolare, stiamo lavorando sull'uso dell'apprendimento automatico per applicazioni di informatica medica nel campo della pediatria. La collaborazione è testimoniata dalla seguente pubblicazione:
  - C. Esposito, M. Cerulo, B. Lepore, V. Coppola, D. D'Auria, G. Esposito, R. Carulli, F. Del Conte, M. Escolino, Robotic-assisted pyeloplasty in children: a systematic review of the literature, Journal of Robotic Surgery, pp. 1-8, 2023.
- Collaborazione con il Prof. Raffaele Russo, esperto in Ortopedia e Traumatologia prima presso l'Ospedale Pellegrini di Napoli e poi presso l'Ospedale Pineta Grande di Castel Volturno. La collaborazione si concentra sulle protesi mediche ed è testimoniata dalla seguente pubblicazione:
  - 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.
- PI of the FISIR 2020 project "reCOVeryalD: An intelligent telemonitoring application for symptomatic, asymptomatic, and pre-symptomatic coronavirus patients" (230K€ from the Ministry of University and Research), written in collaboration with the Scuola Superiore Sant'Anna of Pisa; in particular, with the group led by Prof. Arianna Menciassi (BioRobotics Laboratory).

- PI of the RTD 2021 project "reCOVeraID: An intelligent telemonitoring application for symptomatic, asymptomatic and pre-symptomatic coronavirus patients" (10K€ from the Autonomous Province of Bolzano, Italy), written in collaboration with George Mason University, Virginia, USA; in particular, with the group led by Prof. Massimiliano Albanese.
- Member of the "Laboratorio Nazionale Digital Health CINI". The Digital Health National Lab integrates many different skills and data types usually siloed to enhance healthcare research and operations with actionable tools that improve people health and quality of life.
- Collaboration with the University of Washington, Seattle, USA. Specifically, I was a Visiting PhD Scholar, under the supervision of Prof. Blake Hannaford, and worked on innovative robotic surgery projects and simulators in the healthcare context.
- Owner of the "Introduction to Robotics in the Medical context" course for doctoral students in computer science at the University of L'Aquila. Specifically, this course is an 'introduction to basic robotic technologies in the medical context, with special emphasis on surgical robotics. In addition, the course provides a general overview of the content of medical robotics and AI-based applications in the healthcare context; consequently, participants will be able to acquire basic information on such topics.
- Collaboration with the Department of Engineering and Information Science and Mathematics, University of L'Aquila; in particular, with the group headed by Professor Stefania Costantini. Specifically, the collaboration focuses on the use of artificial intelligence in the healthcare context, and is evidenced by the following publications:
  - C. M. Bertoncelli, S. Costantini, F. Persia, D. Bertoncelli, D. D'Auria (2023). PredictMed-Epilepsy: A Multi-agent based System for Epilepsy, accepted for publication on the Computer Methods and Programs in Biomedicine journal .
  - 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 .
  - 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.
- Collaboration with Dr. Joseph Barr of Acronis SCS, California, USA. The collaboration focuses on telemedicine, and is evidenced by the following publication:
  - 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.

## REALIZZAZIONE DI ATTIVITÀ PROGETTUALE

(indicare, data, progetto, ecc.)

- PI of the FISR 2020 project "reCOVeraID: An intelligent telemonitoring application for symptomatic, asymptomatic, and pre-symptomatic coronavirus patients" (230K€ from the Ministry of University and Research), written in collaboration with the Scuola Superiore Sant'Anna of Pisa; in particular, with the group led by Prof. Arianna Menciassi.
- PI del progetto RTD 2021 "reCOVeraID: Un'applicazione di telemonitoraggio intelligente per pazienti sintomatici, asintomatici e pre-sintomatici affetti da coronavirus" (10K€ dalla Provincia Autonoma di Bolzano), scritto in collaborazione con la George Mason University, Virginia, USA; in particolare, con il gruppo diretto dal Prof. Massimiliano Albanese.

**ORGANIZZAZIONE, DIREZIONE E COORDINAMENTO DI GRUPPI DI RICERCA NAZIONALI E INTERNAZIONALI, O PARTECIPAZIONE AGLI STESSI**

*(per ciascuna voce inserire anno, ruolo, gruppo di ricerca, ecc.)*

- Member of the "Laboratorio Nazionale Digital Health CINI". The Digital Health National Lab integrates many different skills and data types usually siloed to enhance healthcare research and operations with actionable tools that improve people health and quality of life.
- Chair of the IEEE Technical Committee on Semantic Computing (IEEE TCSEM), <https://www.computer.org/communities/technical-committees/tcsem>. The Technical Community on Semantic Computing (TCSEM) addresses the derivation and matching of the semantics of computational content to that of naturally expressed user intentions in order to retrieve, manage, manipulate or even create content, where "content" may be anything including video, audio, text, software, hardware, network, process, etc. This connection between content and the user intentions is made via (1) Semantic Analysis, which analyzes content with the goal of converting it to machine processable descriptions (semantics); (2) Semantic Integration, which integrates content and semantics from multiple sources; (3) Semantic Applications, which utilize content and descriptions to solve problems; and (4) Semantic Interface, which interprets users' intentions expressed in natural language or other communicative forms.
- Collaboration with the University of Washington, Seattle, USA. Specifically, I was a Visiting PhD Scholar, under the supervision of Prof. Blake Hannaford, and worked on innovative robotic surgery projects and medical simulators.
- Owner of the "Introduction to Robotics in the Medical context" course for doctoral students in computer science at the University of L'Aquila. Specifically, this course is an introduction to basic robotic technologies in the medical context, with special emphasis on surgical robotics. In addition, the course provides a general overview of the content of medical robotics and AI-based applications in the healthcare context; consequently, participants will be able to acquire basic information on such topics.
- Expert for the European Commission on individual fellowships of the Marie Skłodowska-Curie Action. In particular, I am involved in the evaluation of proposals, award applications and tenders. I monitor actions, grant agreements and public procurement contracts. In addition, I provide opinions and advice on the preparation, implementation, and evaluation of EU programs and policy design in the areas of robotics, 2018, 2019, 2020.
- Collaboration with the Department of Informatics at the University of Zurich, and in particular with Prof. Sven Helmer, evidenced by the following publications:
  - o D'Auria D, Siciliano B, Persia F, Bettini F, Helmer S (2018). SARRI: A SmArt Rapiro robot integrating a framework for automatic high-level surveillance event detection. In: Proceedings - 2nd IEEE International Conference on Robotic Computing, IRC 2018. ISBN: 978-153864651-9, doi: 10.1109/IRC.2018.00050.
  - o D'Auria D, Persia F, Bettini F, Helmer S (2019). Predicting and Preventing Dangerous Events via Video Surveillance Using a Robotic Platform. In: Proceedings - 3rd IEEE International Conference on Robotic Computing, IRC 2019. ISBN: 978-153869245-5, doi: 10.1109/IRC.2019.00113.
  - o Persia F, Pilato G, Ge M, D'Auria D, Helmer S (2020). Improving orienteering-based tourist trip planning with social sensing. FUTURE GENERATION COMPUTER SYSTEMS, ISSN: 0167-739X, doi: 10.1016/j.future.2019.10.028.
- Collaboration with Dr. Giovanni Pilato of the Institute of High Performance Computing and Networks of the National Research Council (ICAR/CNR) in Palermo, Italy. The collaboration involved the following publications:
  - o 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>

- 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> .
  - 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.
  - F. Persia, D. D'Auria, G. Pilato, An Overview of Video Surveillance Approaches, 2020 IEEE 14th International Conference on Semantic Computing (ICSC), virtual.
- Multi-year collaboration with Prof. Mouzhi Ge of Masaryk University, Brno (formerly), now at Deggendorf Institute of Technology, Germany, evidenced by the following publications:
  - 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>
  - 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> .
  - F. Persia, D. D'Auria, M. Ge, Improving Learning System Performance with Multimedia Semantics, 2020 IEEE 14th International Conference on Semantic Computing (ICSC), virtual.
  - 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.
- Collaboration with Prof. Moscato of the Department of Electrical Engineering and Information Technology, University of Naples Federico II; specifically, the collaboration focuses on medical information systems and is evidenced by the following publication:
  - 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> .
- Collaboration with the Department of Engineering and Information Science and Mathematics, University of L'Aquila; in particular, with the group headed by Professor Stefania Costantini. Specifically, the collaboration focuses on the use of artificial intelligence in the healthcare context, and is evidenced by the following publications:
  - C. M. Bertoncelli, S. Costantini, F. Persia, D. Bertoncelli, D. D'Auria (2023). PredictMed-Epilepsy: A Multi-agent based System for Epilepsy, accepted for publication on the *Computer Methods and Programs in Biomedicine* journal .
  - 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 .
  - 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.
- Collaboration with Dr. Joseph Barr of Acronis SCS, California, USA. The collaboration focuses on telemedicine, and is evidenced by the following publication:
  - 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.
- Collaboration with the group headed by Prof. Ciro Esposito, Full Professor of Pediatric Surgery at the University of Naples Federico II. Specifically, we are working on the use of machine learning

for medical informatics applications in the field of pediatrics. The collaboration is evidenced by the following publication:

- C. Esposito, M. Cerulo, B. Lepore, V. Coppola, D. D'Auria, G. Esposito, R. Carulli, F. Del Conte, M. Escolino, Robotic-assisted pyeloplasty in children: a systematic review of the literature, *Journal of Robotic Surgery*, pp. 1-8, 2023.
- Collaboration with Prof. Raffaele Russo, an expert in Orthopedics and Traumatology first at the Pellegrini Hospital in Naples and then at the Pineta Grande Hospital in Castel Volturno. The collaboration focuses on medical prosthesis and is evidenced by the following publication:
  - 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.
- Expert of the European Commission for evaluation of proposals submitted to KDT JU (Key Digital Technologies Joint Undertaking) 2023 about the use of artificial intelligence in medicine. In particular, experts assist in: Evaluation of proposals, prize applications and tenders; Monitoring of actions, grant agreements, public procurement contracts. In addition, experts provide opinion and advise on: preparation, implementation and evaluation of EU programmes and design of policies.

#### **TITOLARITÀ DI BREVETTI**

*(per ciascun brevetto, inserire autori, titolo, tipologia, numero brevetto, ecc.)*

- Patent: D. D'Auria, B. Goff, B. Hannaford, Lighted Uterine Manipulator, pending, 2013.

#### **ATTIVITÀ DI RELATORE A CONGRESSI E CONVEGNI NAZIONALI E INTERNAZIONALI**

*(inserire titolo congresso/convegno, data, ecc.)*

##### **Presentazioni a conferenze**

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

#### 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

#### CONSEGUIMENTO DI PREMI E RICONOSCIMENTI NAZIONALI E INTERNAZIONALI PER ATTIVITÀ DI RICERCA (inserire premio, data, ente organizzatore, ecc.)

- IEEE Best Leadership Award, Presented At IEEE ISM/IRC/BigMM 2022 (Naples 2022), December 5-7, Naples, Italy. Winner of the IEEE Best Leadership Award, as a result of continued fruitful collaboration with Prof. Phillip Sheu of the University of California, Irvine, USA, in organizing

numerous prestigious IEEE conferences, such as the International Conference on Semantic Computing (IEEE ICSC), the International Conference on Robotic Computing (IEEE IRC), the International Conference on Artificial Intelligence for Industries (IEEE ai4i) and the International Symposium on Multimedia (IEEE ISM). In addition, I was the co-founder of the International Conference on Robotic Computing (IEEE IRC) and the International Conference on Artificial Intelligence for Industries (IEEE ai4i). <https://semanticcomputing.wixsite.com/irc2022/2022awards>

- Winner of the Best Paper Award at the 3rd IEEE International Conference on Artificial Intelligence for Industries (ai4i 2020), September 21-September 23, 2020. The title of the paper is "Telemedicine, Homecare in the Era of COVID-19 & beyond" and the authors Joseph R Barr, Daniela D'Auria and Fabio Persia.

**POSSESSO DEL DIPLOMA DI SPECIALIZZAZIONE EUROPEA RICONOSCIUTO DA BOARD INTERNAZIONALI (relativamente a quei settori concorsuali nei quali è prevista)**  
(indicare diploma, data di conseguimento, ecc.)

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**TITOLI DI CUI ALL'ARTICOLO 24 COMMA 3 LETTERA A) E B) DELLA LEGGE 30 DICEMBRE 2010, N. 240**  
(indicare se contratto di tipologia A o B, Ateneo, data di decorrenza e fine contratto, ecc.)

- RTD/A presso il Dipartimento di Informatica, Sistemistica E Comunicazione dell'Università degli Studi di Milano-Bicocca, INF/01, dal 01/01/2024 al 31/12/2026.
- Assegnista di Ricerca presso la Facoltà di Ingegneria della Libera Università di Bolzano, ING-INF/05, dal 15/08/2023 al 31/12/2023.
- RTD/A presso la Facoltà di Scienze e Tecnologie Informatiche della Libera Università di Bolzano, ING-INF/05, dal 01/03/2020 al 06/08/2023.
- Assegnista di Ricerca presso la Facoltà di Scienze e Tecnologie della Libera Università di Bolzano, dal 01/11/2015 al 31/10/2016.
- Assegnista di Ricerca presso la Facoltà di Scienze e Tecnologie della Libera Università di Bolzano, dal 01/09/2015 al 31/10/2015.

## **PRODUZIONE SCIENTIFICA**

### **PUBBLICAZIONI SCIENTIFICHE**

(per ciascuna pubblicazione indicare: nomi degli autori, titolo completo, casa editrice, data e luogo di pubblicazione, codice ISBN, ISSN, DOI o altro equivalente)

#### **International Academic Referred Journals**

Journal publications ranked Q1 according to Scimago are listed in bold.

**2023**

[J-19] G. Pilato, F. Persia, M. Ge, T. Chondrogiannis, and D. D'Auria. 2023. A Modular Social Sensing System for Personalized Orienteering in the COVID-19 Era. *ACM Trans. Manage. Inf. Syst.* 14, 4, Article 31 (December 2023), 26 pages. <https://doi.org/10.1145/3615359>

[J-18] L. Saxena AK, Borgogni R, Escolino M, D'Auria D, Esposito C. Narrative review: robotic pediatric surgery-current status and future perspectives. *Transl Pediatr.* 2023 Oct 30;12(10):1875-1886. doi: 10.21037/tp-22-427. Epub 2023 Oct 12. PMID: 37969127; PMCID: PMC10644013.

[J-17] D. D'Auria, R. Russo, A. Fedele, F. Addabbo and D. Calvanese, "An Intelligent Telemonitoring Application for Coronavirus Patients: reCOVeralD", *Frontiers in Big Data*, Volume 6, doi: 10.3389/fdata.2023.1205766 , section Medicine and Public Health, 2023.

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

[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 pyeloplasty in children: a systematic review of the literature, *Journal of Robotic Surgery*, pp. 1-8, 2023.

[J-13] D. D'Auria, V. Moscato, M. Postiglione, G. Romito, G. Sperlí, 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>.

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[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.

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[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.

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## **2023**

[C-33] F. Persia and D. D'Auria, "Complex Event Processing in Heterogeneous Domains", 25th IEEE International Symposium on. Multimedia December 11-13, 2023, Laguna Hills, California, USA; December 11-13, 2023.

[C-32] M. Ge, G. Pilato, F. Persia and D. D'Auria, "Recommender System for Social Media: Research Challenges and Future Applications", Fifth IEEE International Conference on Transdisciplinary AI (IEEE TransAI 2023), Laguna Hills, California, USA; September 25-27, 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.

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[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.

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[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.

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[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

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[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.

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Data

21/06/2024

Luogo

Bolzano