

Curriculum Vitae

Personal information

First name(s) / Surname(s) **Paola Pierleoni**
Address(es) 13, Via Bertacchini, 63824, Altidona (FM), Italy
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E-mail p.pierleoni@univpm.it
Nationality Italian
Date of birth December 22, 1960
Gender Female

Occupational field

Work experience

Dates	1998 – up to now
Occupation or position held	Assistant Professor, University Lecturer, Researcher, scientific disciplinary sector ING/INF-03, Telecommunications.
Main activities and responsibilities	Head of the “Wireless Sensor Networks for Internet of Things” research group and Head of the “Sensor Networks and Internet of Thing” Laboratory at the Information Engineering Department of UNIVPM. Responsible for scientific research, industrial research and experimental development activities financed by public bodies or private companies, regulated both by agreements for research and commercial activities, or in the context of research programs. Teacher of the following courses: “Internet and Networks” (3rd year of the Degree Course in Electronic Engineering), “Wireless Sensor Networks for Internet of Things” (2nd year of the Master's Degree Course in Electronic Engineering), “Telecommunication Networks” (1st year of the Degree Course in Information Engineering for Videogames and Virtual Reality), “Internet of Things for the video game and virtual reality industry” (2nd year of the Degree Course in Information Engineering for Videogames and Virtual Reality). Member of the Academic Board of the Doctoral School in Information Engineering since 2003 up to now.
Name and address of employer	Marche Polytechnic University, Via Breccie Bianche, 60131 Ancona, Italy.
Type of business or sector	University education.
Dates	January, 2014 – up to now
Occupation or position held	Chief Executive Officer and Legal Representative.
Main activities and responsibilities	Project management, staff coordination. Design, implementation and testing of the proposed systems.
Name and address of employer	WiSense Srl, Via Albertini 36, 60131, Ancona.

Type of business or sector	<p>The spin off's corporate purpose is to conceive, design and market highly technological and cutting-edge products that are part of the growing world of smart objects. Since its foundation, she has held and still holds the role of Director of Research and Development with particular attention to communication protocols and to the architecture of Wireless Sensor Networks and the Internet of Things. The applications developed to date concern the following areas: Smart Lighting, Smart City, Industrial IoT, Smart Metering, etc. The spin off WiSense s.r.l. was the winner of numerous awards including: 2013 edition of the E-Capital Business Plan Competition; first prize, as proponent of the best project, of the Call for Innovation "moniTower. The pylon of the future: a new energy at the service of the territory" of the 2018 call of TERNA S.p.A. Among the main projects in which WiSense has participated is the design and construction of the new lighting system of the Scrovegni Chapel in Padua, inaugurated on 11 September 2017, which integrated the cutting-edge lighting equipment of iGuzzini Illuminazione S.p.A. with the innovative sensor networks of WiSense s.r.l. improving the user experience through the Internet of Things.</p> <p>There are also numerous products and services developed by WiSense s.r.l. for digital health, with the aim of innovating the assistance and management of fragile, non-self-sufficient people and people with chronic diseases.</p>
Dates	May, 2015 – January, 2019
Occupation or position held	Chief Executive Officer and Legal Representative.
Main activities and responsibilities	Project management, staff coordination. Design, implementation and testing of the proposed systems.
Name and address of employer	BinUp Srl, Via Breccie Bianche, 12, 60131 Ancona (AN)
Type of business or sector	<p>The spin-off has the corporate purpose of conceiving, designing and marketing highly technological and cutting-edge products that are part of the growing world of smart objects in the home, work, health environment with particular attention to Ambient Assisted Living (AAL). From the foundation, and for the next four years, she held the position of Director of Research and Development. The activities carried out concerned the research and development of wearable sensors and Wireless Body Sensor Networks with applications in the biomedical and telemedicine / tele-assistance / tele-rehabilitation, competitive sports and consumer sectors, through the use of specific IoT architectures and solutions for these contexts.</p>
Dates	From April 01, 2020 up to now
Occupation or position held	Responsible for the UNIVPM Research Unit of the activities foreseen by the the European project "STREAM - Strategic development of flood management", 2014 - 2020 Interreg V-A Italy - Croatia CBC Program - Call for proposal 2019; Priority Axis: Safety and resilience - Specific objective: Increase the safety of the Program area from natural and man-made disaster. The project sees the participation of 16 international project partners including the Polytechnic University of Marche represents the reference technological partner of the project for skills specific in the field of ICT. Application ID: 10249186; Duration: 36 Months (2020-2023); Project amount: € 9,411,657.83; Amount for the research unit of the Polytechnic University of Marche: € 490,000.00. https://www.italy-croatia.eu/web/stream
Main activities and responsibilities	The activities under her direct responsibility involve the study and implementation of complete architectures of Early Warning systems for hydrogeological instability, aimed at safeguarding things and people, including the development of solutions for the analysis of people's flows and their tracking, the propositions of new and more performing sensor nodes, compression algorithms and real-time analysis, real-time generation of alarms, implementation of replicable models for alerting in other anthropogenic / natural risk contexts.
Dates	From December 19, 2019 up to now

Occupation or position held	Responsible of the research project "IoT FOR HUMAN SAFETY", for the Polytechnic University of Marche, as a part of the three projects "MIRACLE - Marche Innovation and Research fAcilities for Connected and sustainable Living Environments"; based on the POR FESR 2014 - 2020, 2014/2020 - 2.1 Support for the implementation of complex projects of research and development activities on a few relevant thematic areas and the application of technological solutions functional to the realization of the S3 - call: POR MARCHE FESR 2014/2020 - Axis 1 - OS 2 - Action 2.1 - Intervention 2.1.1- support for the development of a collaborative research platform in the fields of Intelligent Specialization - Area: Home Automation - Thematic area: "Comfort, safety and well-being in life ", approved by decree of the manager of the P.F. Innovation, Research and Internationalization n. 290 of 22 November 2019. CUP: I34I19007230007. Amount of the MIRACLE Project: € 8,268,419.00. Amount of the "IoT FOR HUMAN SAFETY" project: € 2,150,000. (https://www.i-labs.it/)
Main activities and responsibilities	The "MIRACLE" project involves the development and testing of innovative and interoperable innovative solutions in the domain of home automation and living environments, integrating computational intelligence, IoT, cybersecurity, Edge / Cloud computing, and advanced human-machine / environment interfaces. It includes three R&D projects of which "IoT for Human Safety" deals with the definition of a technological infrastructure based on IoT and innovative devices for value-added services.
Dates	From March 11, 2019 up to now
Occupation or position held	Responsible of the research project "SADAB-IT - Smart Awareness in Digital Automation and Business Intelligence with Integrated Tools" funded in the PON MISE call for "Intelligent Factory, Agrifood and Life Sciences" Axis I, Action 1.1.3 PON Businesses and competitiveness 2014-2020. Participants: Polytechnic University of Marche; FATER S.p.A., Via Alessandro Volta, 10, Pescara; Selda s.r.l., Via Porta Torricella, 7, Ascoli Piceno. Start date of the SADABI-IT project: 11 March 2019. CUP: B32C21000880005. Amount 4,000,000.00 Euro. https://www.sadabi.it/
Main activities and responsibilities	The project involves the research and testing of innovative "Industrial Internet of Things" solutions that are able to make production processes, quality control, safety at work, management of raw materials and customer satisfaction at the company more efficient. Paola Pierleoni, in addition to directing and coordinating the research activities of all the project partners, has the scientific responsibility and coordination of all the RUs of the Polytechnic University of Marche, which she involved in specific project activities, and belonging to the following SSD: Information Processing Systems, Biomedical, Automation and Electronics, Telecommunications. The various project activities include the development of wearable sensors for the operators of the production line aimed at safety at work through the acquisition and processing of biometric signals.
Dates	From Novembre 21, 2018 to November 20, 2020
Occupation or position held	Responsible of the research project, for the university spin-off WiSense s.r.l., "POLARIS - POSitioning solution viA contRol Ilghting System", admitted for funding in the POR FESR call 2014 - 2020 - 1.2 "Support for the economic enhancement of innovation through the experimentation and adoption of innovative solutions in processes, products and organizational formulas, as well as through the financing of the industrialization of research results". Call POR MARCHE FESR 2014/2020 AXIS 1 - OS 1 - ACTION 1.2 - "Engineering, industrialization of research results and economic enhancement of innovation (Call for access 2017)". ID 14558. Amount 320.899,00 Euro.
Main activities and responsibilities	The project concerns the development of an indoor localization system based on bluetooth beacon technology integrated in indoor lighting systems.
Dates	From Decembre 13, 2017 to October 24, 2018

Occupation or position held	Responsible of the research project, for the university spin off BinUp s.r.l., "IES-Internet for Energy Solution" admitted for funding in the POR MARCHE FESR 2014-2020 call - Axis 1-Action 4.1 "Support for the development and consolidation of start-ups with a high intensity of knowledge application - Intervention A: creation of a first prototype and / or first modeling of a service". ID 11621. Amount 62,000.00 Euro.
Main activities and responsibilities	The project involved the development of a prototype of an IP sensor node and an energy consumption control and management platform for the planning and control of energy efficiency interventions.

Dates From June 31, 2017 to June 17, 2018

Occupation or position held	General manager of the research project, for the university spin-off WiSense s.r.l., "HELIOS - High Efficient Lighting Instruments for Open Solutions", admitted for funding in the POR MARCHE FESR 2014-2020 call - Axis 1-Action 4.1 "Support for the development and consolidation of start-ups with a high intensity of knowledge application - Intervention A: creation of a first prototype and / or first modeling of a service". Amount 61,750.00 Euro.
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Main activities and responsibilities	The project involved the development of a prototype of a device capable of being integrated into the lighting devices, aimed at creating a DALI-IP interface that would allow advanced remote control of the lighting system.
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Dates From February 26, 2013 to February 28, 2015

Occupation or position held	Responsible for industrial research and experimental development activities of the research project, for the university spin-off WiSense s.r.l., "Il MARCH'ingegno (and the Sibyl): the Marche's way of technological support to the self-sufficient elderly who live alone" funded on a competitive basis by the Marche Region as part of the "Smart home for an active and independent longevity of the elderly" project, together with Semar S.r.l., Via Sardegna Capodaglio, 5, Castelfidardo (AN), call for proposals for the selection of finalized project on the development of integration platforms dedicated to Active Aging and Ambient Assisted Living (DGR 1464 of 7/11/2011). Amount 689,000.00 Euro.
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Main activities and responsibilities	The activity involved the implementation of a network architecture of sensors distributed within the home, the management of wireless connectivity between sensors, actuators and lighting elements, the creation of a local and remote web server system with the related management system, the creation of a dedicated smartphone application for local and remote interaction and for the control of LED drivers.
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Education and training

Dates November, 1995

Title of qualification awarded	Ph.D. degree in Electrical Engineering from the Polytechnic University of Marche.
Principal subjects/occupational skills covered	Study and characterization of telecommunication systems and components.
Name and type of organisation providing education and training	Marche Polytechnic University.

Dates April, 1991

Title of qualification awarded	Master Degree in Electronic Engineering.
Principal subjects/occupational skills covered	All the fields of Electronic Engineering.
Name and type of organisation providing education and training	Marche Polytechnic University.

Personal skills and competences

Mother tongue(s)

Italiano

Other language(s)

Self-assessment

European level ()*

English

Understanding				Speaking				Writing	
Listening		Reading		Spoken interaction		Spoken production			
B1	Independent user	B2	Independent user	B1	Independent user	B2	Independent user	B2	Independent user

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

Social skills and competences

Team work: I have worked in various types of teams from research teams to industrial teams
Good communication skills gained through my experience of academical and industrial team leader.

Organisational skills and competences

Good experience in project and team management.
Leadership, as currently responsible for a team of several people.

Technical skills and competences

Deep knowledge of the following topics/technologies:

- ICT Lab instrumentation and radio communication / optical technologies.
- Sensors, sensor networks architectures and protocols.
- Domotic systems and technologies for Ambient Assisted Living.
- Industrial Internet of Things, Industry 4.0 and 5.0 applications and services.
- Fog/Edge/Cloud computing technologies.
- Localization techniques and location-based services.
- Early Warning Systems and very low latency communications.
- Smart City and Smart Environmet.

Deep knowledge of development platforms and programming languages. Among these last: Microsoft Office, Matlab/Simulink and C, C++, Java, Phytion languages.

Recent publications

- Pierleoni, P., Concetti, R., Belli, A., & Palma, L. (2019). Amazon, Google and Microsoft solutions for IoT: Architectures and a performance comparison. *IEEE Access*, 8, 5455-5470.
- Esposito, M., Palma, L., Belli, A., Sabbatini, L., & Pierleoni, P. (2022). Recent Advances in Internet of Things Solutions for Early Warning Systems: A Review. *Sensors*, 22(6), 2124.
- Pierleoni, P., Marzorati, S., Ladina, C., Raggiunto, S., Belli, A., Palma, L., ... & Valenti, S. (2018). Performance evaluation of a low-cost sensing unit for seismic applications: field testing during seismic events of 2016-2017 in Central Italy. *IEEE Sensors Journal*, 18(16), 6644-6659.
- Pierleoni, P., Belli, A., Palma, L., Valenti, S., Raggiunto, S., Incipini, L., & Ceregioli, P. (2018). The Scrovegni Chapel moves into the future: An innovative Internet of Things solution brings new light to Giotto's masterpiece. *IEEE Sensors Journal*, 18(18), 7681-7696.
- Pierleoni, P., Palma, L., Belli, A., & Sabbatini, L. (2020, June). Using plastic injection moulding machine process parameters for predictive maintenance purposes. In *2020 International Conference on Intelligent Engineering and Management (ICIEM)* (pp. 115-120). IEEE.
- Pierleoni, P., Belli, A., Palma, L., Incipini, L., Raggiunto, S., Mercuri, M., ... & Sabbatini, L. (2019, June). A cross-protocol proxy for sensor networks based on CoAP. In *2019 IEEE 23rd International Symposium on Consumer Technologies (ISCT)* (pp. 251-255). IEEE.
- Pierleoni, P., Gentili, A., Mercuri, M., Belli, A., Garello, R., & Palma, L. (2021). Performance Improvement on Reception Confirmation Messages in Bluetooth Mesh Networks. *IEEE Internet of Things Journal*, 9(3), 2056-2070.
- Pinti, F., Belli, A., Palma, L., Gattari, M., & Pierleoni, P. (2020). Validation of forward voltage method to estimate cracks of the solder joints in high power led. *Electronics*, 9(6), 920.
- Pierleoni, P., Belli, A., Palma, L., & Sabbatini, L. (2020). A versatile machine vision algorithm for real-time counting manually assembled pieces. *Journal of Imaging*, 6(6), 48.
- Incipini, L., Mancina, T., El Mehtedi, M., & Pierleoni, P. (2019, September). IoT Network for Industrial Machine Energy Monitoring. In *2019 AEIT International Annual Conference (AEIT)* (pp. 1-6). IEEE.
- Pierleoni, P., Conti, M., Belli, A., Palma, L., Incipini, L., Sabbatini, L., ... & Concetti, R. (2019, June). Iot solution based on MQTT protocol for real-time building monitoring. In *2019 IEEE 23rd International Symposium on Consumer Technologies (ISCT)* (pp. 57-62). IEEE.
- Pierleoni, P., Belli, A., Palma, L., Palmucci, M., & Sabbatini, L. (2020, June). A machine vision system for manual assembly line monitoring. In *2020 International Conference on Intelligent Engineering and Management (ICIEM)* (pp. 33-38). IEEE.
- Incipini, L., Belli, A., Palma, L., Concetti, R., & Pierleoni, P. (2019, May). Databases performance evaluation for IoT systems: The Scrovegni chapel use case. In *2019 42nd International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO)* (pp. 463-468). IEEE.
- Raggiunto, S., Belli, A., Palma, L., Ceregioli, P., Gattari, M., & Pierleoni, P. (2019). An Efficient Method for LED Light Sources Characterization. *Electronics*, 8(10), 1089.
- Pierleoni, P., Belli, A., Esposito, M., Concetti, R., & Palma, L. (2022, September). Earthquake Early Warning Services Based on Very Low-Cost Internet of Things Devices. In *2022 61st FITCE International Congress Future Telecommunications: Infrastructure and Sustainability (FITCE)* (pp. 1-5). IEEE.
- Incipini, L., Belli, A., Palma, L., Concetti, R., & Pierleoni, P. (2019, May). MIMIC: a Cybersecurity Threat Turns into a Fog Computing Agent for IoT Systems. In *2019 42nd*

International Convention on Information and Communication Technology, Electronics and Microelectronics (MIPRO) (pp. 469-474). IEEE.

Pierleoni, P., Belli, A., Palma, L., & Sabbatini, L. (2021, January). Diagnosis and Prognosis of a Cartesian Robot's Drive Belt Looseness. In 2020 IEEE International Conference on Internet of Things and Intelligence System (IoTaIS) (pp. 172-176). IEEE.

Baldi, M., Cancellieri, G., Chiaraluce, F., De Santis, A., Gambi, E., & Pierleoni, P. (2019). Telecommunications in the ICT Age: From Research to Applications. In *The First Outstanding 50 Years of "Università Politecnica delle Marche"* (pp. 53-71). Springer, Cham.

Incipini, L., Palma, L., Belli, A., Raggiunto, S., & Pierleoni, P. (2019, June). Performance Evaluation of a Full IPv6-based Internet of Things Wireless Sensor Network. In 2019 IEEE 23rd International Symposium on Consumer Technologies (ISCT) (pp. 333-338). IEEE.

Lorenzo, I., Tommaso, M., El Mehtedi, M., & Paola, P. (2019). IoT Network for Industrial Machine Energy Monitoring. In 2019 AEIT International Annual Conference (AEIT). IEEE.

Paoletti, M., Concetti, R., Pierleoni, P., Belli, A., & Palma, L. (2019). Seismic Noise and Site Response Analysis Using Accelerometer Sensors. *Sensors & Transducers*, 238(11), 8-15.
Paoletti, M., Belli, A., Palma, L., Vallasciani, M., & Pierleoni, P. (2020). A wireless body sensor network for clinical assessment of the flexion-relaxation phenomenon. *Electronics*, 9(6), 1044.

Pierleoni, P., Belli, A., Palma, L., Paoletti, M., Raggiunto, S., & Pinti, F. (2019, June). Postural stability evaluation using wearable wireless sensor. In 2019 IEEE 23rd International Symposium on Consumer Technologies (ISCT) (pp. 256-260). IEEE.

Gaiduk, M., Orcioni, S., Seepold, R., Madrid, N. M., Pierleoni, P., Gentili, A., ... & Conti, M. (2022). Heart and Breathing Rate Measurement Using Low Intrusive Monitoring Systems. In *German-Italian Workshop Social Innovation in Long-Term Care through Digitalization* (pp. 37-49). Springer, Cham.

Egi, S. M., Altepe, C., Pieri, M., Sinoplu, D. R., Cialoni, D., Özyiğit, T., ... & Marroni, A. (2018). Design and implementation of an underwater telemetric glucose monitoring system for scuba divers. *Hittite Journal of Science and Engineering*, 5(2), 141-146.

Pierleoni P., Belli A., Pinti F., Paoletti M., Raggiunto S., Palma L. (2022). An optimized system for mobility evaluation in frailty phenotype assessment. *JOURNAL OF AMBIENT INTELLIGENCE AND HUMANIZED COMPUTING*, p. 1-8, ISSN: 1868-5137, doi: 10.1007/s12652-022-03802-3

Gentili, A., Belli, A., Palma, L., Egi, S. M., & Pierleoni, P. (2019, December). A Real-Time Algorithm for PPG Signal Processing During Intense Physical Activity. In *EAI International Conference on IoT Technologies for HealthCare* (pp. 22-36). Springer, Cham.

Pierleoni, P., Belli, A., Gentili, A., Incipini, L., Palma, L., Raggiunto, S., ... & Burattini, L. (2021). Real-time smart monitoring system for atrial fibrillation pathology. *Journal of Ambient Intelligence and Humanized Computing*, 12(4), 4461-4469.

Pierleoni, P., Belli, A., Concetti, R., Palma, L., Pinti, F., Raggiunto, S., ... & Monteriù, A. (2018, July). A non-invasive method for biological age estimation using frailty phenotype assessment. In *Italian Forum of Ambient Assisted Living* (pp. 81-94). Springer, Cham.

Pierleoni, Paola, Belli, Alberto, Concetti, Roberto, Palma, Lorenzo, Pinti, Federica, Raggiunto, Sara, Sabbatini, Luisiana, Valenti, Simone, Monteriù, Andrea (2021). Biological age estimation using an eHealth system based on wearable sensors. *JOURNAL OF AMBIENT INTELLIGENCE AND HUMANIZED COMPUTING*, p. 1-12, ISSN: 1868-5137, doi: 10.1007/s12652-019-01593-8

Paola Pierleoni, Alberto Belli, Omid Bazgir, Lorenzo Maurizi, Michele Paniccia, Lorenzo Palma (2019). A Smart Inertial System for 24h Monitoring and Classification of Tremor and Freezing of Gait in Parkinson's Disease. *IEEE SENSORS JOURNAL*, vol. 19, p. 11612-11623, ISSN: 1530-437X, doi: 10.1109/JSEN.2019.2932584

Pierleoni, P. (2020, April). A Real-Time Algorithm for PPG Signal Processing During Intense Physical Activity. In *IoT Technologies for HealthCare: 6th EAI International Conference, HealthyIoT 2019, Braga, Portugal, December 4–6, 2019, Proceedings (Vol. 314, p. 22)*. Springer Nature.

Pierleoni, P., Raggiunto, S., Marzorati, S., Palma, L., Cucchiarelli, A., & Belli, A. (2021). Activity Monitoring Through Wireless Sensor Networks Embedded Into Smart Sport Equipments: The Nordic Walking Training Utility. *IEEE Sensors Journal*, 22(3), 2744-2757.

Pierleoni, P., Belli, A., Palma, L., Mercuri, M., Verdini, F., Fioretti, S., ... & Pinti, F. (2019, August). Validation of a gait analysis algorithm for wearable sensors. In *2019 International Conference on Sensing and Instrumentation in IoT Era (ISSI)* (pp. 1-6). IEEE.

Pierleoni, P., Raggiunto, S., Belli, A., Paniccia, M., Bazgir, O., & Palma, L. (2022). A Single Wearable Sensor for Gait Analysis in Parkinson's Disease: A Preliminary Study. *Applied Sciences*, 12(11), 5486.

Pierleoni, P., Mercuri, M., Belli, A., Pieri, M., Marroni, A., & Palma, L. (2019). Doppler ultrasound dataset for the development of automatic emboli detection algorithms. *Data in brief*, 27, 104739.

Pierleoni, P., Palma, L., Belli, A., Pieri, M., Maurizi, L., Pellegrini, M., & Marroni, A. (2019). An EMD-based algorithm for emboli detection in echo Doppler audio signals. *Electronics*, 8(8), 824.

Campanella, S., Sabbatini, L., Cherubini, V., Tiberi, V., Marino, M., Pierleoni, P., ... & Palma, L. (2022). Machine Learning Approach for Care Improvement of Children and Youth with Type 1 Diabetes Treated with Hybrid Closed-Loop System. *Electronics*, 11(14), 2227.

Bazgir, O., Habibi, S. A. H., Palma, L., Pierleoni, P., & Nafees, S. (2018). A classification system for assessment and home monitoring of tremor in patients with Parkinson's disease. *Journal of medical signals and sensors*, 8(2), 65.

Pierleoni, Paola, Belli, Alberto, Maurizi, Lorenzo, Palma, Lorenzo, Pernini, Luca, Paniccia, Michele, Valenti, Simone (2016). A Wearable Fall Detector for Elderly People Based on AHRS and Barometric Sensor. *IEEE SENSORS JOURNAL*, vol. 16, p. 6733-6744, ISSN: 1530-437X, doi: 10.1109/JSEN.2016.2585667

Pierleoni, P., Belli, A., Gentili, A., Incipini, L., Palma, L., Valenti, S., & Raggiunto, S. (2018, July). A eHealth system for atrial fibrillation monitoring. In *Italian Forum of Ambient Assisted Living* (pp. 229-241). Springer, Cham.

Sbrollini, A., Caraceni, G., Nasim, A., Marcantoni, I., Morettini, M., Belli, A., ... & Burattini, L. (2019, June). Self-monitoring of cardiac risk while running around Ancona. In *2019 IEEE 23rd International Symposium on Consumer Technologies (ISCT)* (pp. 1-4). IEEE.

Pierleoni, P., Gambi, E., Ricciuti, M., Sbrollini, A., Palma, L., Belli, A., ... & Burattini, L. (2019). Simultaneously acquired data from contactless and wearable devices for direct and indirect heart-rate measurement. *Data in brief*, 26, 104436.

Pierleoni P., Pernini L., Belli A., Palma L. (2014). An Android-Based Heart Monitoring System for the Elderly and for Patients with Heart Disease. *INTERNATIONAL JOURNAL OF TELEMEDICINE AND APPLICATIONS*, vol. 2014, p. 1-11, ISSN: 1687-6415, doi: 10.1155/2014/625156

Cotechini, V., Belli, A., Palma, L., Morettini, M., Burattini, L., & Pierleoni, P. (2019). A dataset for the development and optimization of fall detection algorithms based on wearable sensors. *Data in brief*, 23.

Nasim, A., Pinti, F., Gentili, A., Belli, A., Palma, L., & Pierleoni, P. (2019, August). Dynamic Segmented Beat Modulation Method for Denoising ECG Data from Wearable Sensors. In 2019 International Conference on Sensing and Instrumentation in IoT Era (ISSI) (pp. 1-4). IEEE.