

PERSONAL INFORMATION

Date of Birth: April, 4th 1985

Place of Birth: Chiavari, Genoa – Italy

Nationality: Italian

Current Position: Assistant Professor at the University of Genoa, Italy

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SHORT BIO

Chiara Garibotto was born in Chiavari, Italy in 1985. In 2012 she got her Bachelor Degree in Telecommunications Engineering at the University of Genoa. In 2015 she achieved a Master Degree in Multimedia Signal Processing and Telecommunication Networks with a thesis on Quality of Service in Software Defined Networks. In 2019 she got her PhD in Science and Technology for Electronic and Telecommunication Engineering at the University of Genoa working on Multimedia Context Awareness for Smart Mobile Environments. She is currently Assistant Professor and member of the Digital Signal Processing (DSP) Laboratory at the University of Genoa, Italy.

She is author of over 40 articles, including journals, conference proceedings and book chapters, contributing with many research works to previous e-Health tracks of ComSoc flagship conferences and journals of interest for the eHealth community. She is also associate editor for the international journal *Frontiers in the Internet of Things*. Furthermore, she has been involved in several funded e-Health related projects, both national and international, where she provided scientific and technical contributions with her core expertise in multimedia signal processing and networking, both in terms of scientific research and technology transfer.

She is Member of the IEEE Communication Society (ComSoc) and IEEE Signal Processing Society (SPS), IEEE Internet of Things Community and IEEE Young Professionals. She is a proudly active member of the IEEE ComSoc Technical Committee on eHealth, attending all the latest TC meetings in Globecom and ICC, contributing with her latest research to the field and organizing related events. She is also member of other IEEE ComSoc TCs, such as the Satellite and Space Communications, Signal Processing and Computing for Communications, Internet of Things, Ad Hoc & Sensor Networks and Multimedia Communications.

In the framework of eHealth and ComSoc sponsored initiatives, she was member of the Organizing Committee of the international conference IEEE Healthcom 2022 and the IEEE ComSoc eHealth Technical Committee PhD School 2023. She was also Chair of the Evaluation Board for the IEEE ComSoc PhD Student Award Poster Competition 2023, within the same School. She will be Session Chair within the eHealth track for the IEEE conference Globecom 2023 in Kuala Lumpur, Malaysia.

For what concerns the most recent activities, she has been invited speaker for the eHealth Special Session at the IEEE World Forum on the Internet of Things 2023 in Aveiro, Portugal. Also, she is tutorial speaker on eHealth over 5G/6G at the IEEE Future Networks World Forum 2023 in Baltimore, MD, USA.

Her main research activities concern Multimedia Signal Processing, Context Awareness, Intelligent Sensing and Machine Learning, especially applied to the framework of e-Health, Internet of Things (IoT), Smart Environments and Safety & Security Applications.

RELEVANT PUBLICATIONS

I. Bisio, C. Garibotto, A. Grattarola, F. Lavagetto and A. Sciarrone, "Exploiting Context-Aware Capabilities over the Internet of Things for Industry 4.0 Applications", IEEE Network Magazine, vol. 32, no. 3, pp. 101-107, May/June 2018, doi: 10.1109/MNET.2018.1700355.

I. Bisio, C. Garibotto, F. Lavagetto and A. Sciarrone, "When eHealth Meets IoT: a Smart Wireless System for Post-Stroke Home Rehabilitation", IEEE Wireless Communications Magazine, vol. 26, no. 6, pp. 24-29, December 2019, doi: 10.1109/MWC.001.1900125.

I. Bisio, A. Fedeli, C. Garibotto, F. Lavagetto, M. Pastorino and A. Randazzo, "Two Ways for Early Detection of a Stroke Through a Wearable Smart Helmet: Signal Processing vs. Electromagnetism," in IEEE Wireless Communications, vol. 28, no. 3, pp. 22-27, June 2021, doi: 10.1109/MWC.001.2000401.

A. Sciarrone, I. Bisio, C. Garibotto, F. Lavagetto, M. Hamedani, V. Prada, A. Schenone, F. Boero, G. Gambari, M. Cereia and M. Jurilli, "Early Detection of External Neurological Symptoms through a Wearable Smart-Glasses Prototype," in Journal of Communications Software and Systems, vol. 17, no. 2, pp. 160-168, June 2021, doi: 10.24138/jcomss-2021-0071.

A. Sciarrone, I. Bisio, C. Garibotto, F. Lavagetto, G. Staude and A. Knopp, "Leveraging IoT Wearable Technology towards Early Diagnosis of Neurological Diseases," IEEE Journal on Selected Areas in Communications, vol. 39, no. 2, pp. 582-592, Feb. 2021, doi: 10.1109/JSAC.2020.3021573.

I. Bisio, C. Garibotto, F. Lavagetto and A. Sciarrone, "Towards IoT-based eHealth Services: a Smart Prototype System for Home Rehabilitation", 2019 IEEE Global Communications Conference (GLOBECOM), Hawaii, USA, 2019, pp. 1-6, doi: 10.1109/GLOBECOM38437.2019.9013194.

I. Bisio, C. Garibotto, F. Lavagetto, A. Knopp, A. Sciarrone and G. Staude, "NeuroGlasses: A Wearable Prototype for Neurological Symptoms Recognition", ICC 2020 - 2020 IEEE International Conference on Communications (ICC), 2020, pp. 1-7, doi: 10.1109/ICC40277.2020.9149017.

A. Sciarrone et al., "NeuroGlasses: A Wearable Prototype for Early Detection of Neurological Symptoms," 2020 5th International Conference on Smart and Sustainable Technologies (SpliTech), 2020, pp. 1-6, doi: 10.23919/SpliTech49282.2020.9243713.

I. Bisio, C. Garibotto, F. Lavagetto, A. Sciarrone and M. Shahid, "Feet Pressure Prediction from Lower Limbs IMU Sensors for Wearable Systems in Remote Monitoring Architectures", 2023 IEEE Global Communications Conference (GLOBECOM), Kuala Lumpur, Malaysia. [to appear]

I. Bisio, C. Garibotto, F. Lavagetto, and A. Sciarrone, "Patient Monitoring through eHealth Solutions: A Signal Processing Perspective," Chapter 6 in CNIT Technical Report-08: "ICT for Health: Sensing, Data Analysis, Applications", Editors: M. Rossi, G. Cisotto, R. Raheli, Texmat, 2021, ISBN: 9788894982541.

CALL FOR SECRETARY NOMINATIONS FOR THE eHEALTH TC - 2023

STATEMENT

Dear eHealth TC N&E committee and fellow Members,

since the very beginning of my career, I have always been active in the e-Health field.

I am author of many research works, including journals, conference proceedings and book chapters, contributing to the e-Health tracks of ComSoc flagship conferences such as IEEE Globecom and ICC, and journals of interest for the eHealth community. I've also been involved in several e-Health related projects, both national and international, where I provided scientific and technical contributions with my core expertise in multimedia signal processing and networking, both in terms of scientific research and technology transfer.

I've been member of the Organizing Committee of the international ComSoc conference IEEE Healthcom 2022 and the IEEE ComSoc eHealth Technical Committee PhD School 2023, and I will be also involved in the organization of IEEE Healthcom 2025. I've been recently appointed session chair for the eHealth track of the ComSoc flagship conference IEEE Globecom 2023 in Kuala Lumpur. Recently, I've also applied as candidate Track Chair for the eHealth SAC symposium for IEEE Globecom 2025.

I think that eHealth is a very important topic, a developing framework deserving great research interest and cooperation. Its peculiar multidisciplinary nature allows joining two different but complementary worlds: engineering and medicine, thus enabling fruitful scientific and technical collaboration in many different applications and scenarios. In my opinion it is essential to foster the growth of our community by broadening our TC to new members to be involved in eHealth related research and activities.

I stand firmly behind the importance of undertaking concrete initiatives, such as the organization of conferences, PhD schools, and thematic workshops. In particular, it is extremely important to the eHealth TC to look after the organization of the next editions of the Healthcom conference to disseminate the latest works on the field. Furthermore, I believe it is fundamental to follow up on the latest initiatives such the IEEE ComSoc eHealth TC PhD School to potentially acquire new TC members and to focus the innovative contribution of the youngest researchers on the main challenges related to future eHealth. Also it is essential to organize topical workshops within the most important flagship conferences of the IEEE ComSoc such as Globecom and ICC, to further state the importance and timeliness of our eHealth community.

It would really be an honor and privilege to continue to serve this important TC as Secretary, supporting Chair and Vice-chair in leading and coordinating our group within the IEEE Communication Society.

Sincerely,

Chiara Garibotto

