Graziano Pravadelli, PhD in Computer Science, IEEE senior member, chair of the IFIP 10.5 working group on design and engineering of electronic systems, is full professor of information processing systems (ING-INF/05) at the Department of Engineering for Innovation Medicine at the University of Verona (Italy), where he leads the IoT4Care research group on the design and validation of systems to promote well-being and health of people through technologies related to the Internet of Things (IoT). He is also a member of the Electronic System Design group at the same department, where he leads the research on semi-formal verification techniques for HW/SW systems. In 2007, he co-founded EDALAB s.r.l. (Italy), an SME is developing IoT-based monitoring solutions for smart building and well-being.

MAIN RESEARCH INTERESTS

- modeling, simulation, and semi-formal verification of cyber-physical systems;
- human activity recognition through wearable and environmental sensors;
- design of IoT-based virtual coaching and remote monitoring platforms for people with special needs and neurodegenerative diseases.

In this areas, he has cooperated with several international institutions like, for example, the University of Essex (UK), the Technical University of Chemnitz (Germany), the Technical University of Munich (Germany), the University of Paderbon (Germany), the University of Tokyo (Japan), the University of Michigan Ann Arbour (USA), the University of Southampton (UK), the University of California at Irvine (USA), the Tallinn University of Technology (Estonia), the Linkoeping University (Sweden), the University of Graz (Austria), the University of Cantabria (Spain), OFFIS (Germany), FBK (Italy), CEA-LETI (France), STMicroelectronics (Italy), Synopsys (US), IBM (US), University of Florida (US), Ecole Centrale Lyon (France), Rennes University (France).

POSITIONS AND ROLES

2024 – President Quality Assurance Board, Università Telematica Internazionale Uninettuno, Rome;

2023 – President of the Teaching Council for Computer Engineering, University of Verona;

2023 – Full professor, Department of Engineering for Innovation Medicine, University of Verona;

2020 – Registered in the ANVUR register of system experts;

2015 – Registered in the ANVUR register of disciplinary experts;

2007 – Co-founder EDALab s.r.l.;

2018 – 2023 Full professor, Department of Computer Science, University of Verona;

2017 – 2021 President, Quality Assurance Board, University of Verona;

2011 – 2018 Associate professor, Department of Computer Science, University of Verona;

2005 – 2010 Assistant professor, Department of Computer Science, University of Verona;

2004 – 2005 Post-doc, Department of Computer Science, University of Verona;

BIBLIOMETRIC INDEXES

SCOPUS

- H-index: 20
- Total citations: 1461
- Total indexed contributions: 159

SCHOLAR

- H-index: 25
- Total citations: 2326
- Total indexed contributions: 212

AWARDS AND HONORS

- IFIP service award for outstanding contributions to the International Federation for Information Processing and the Informatics Community. September 2023
- Best FSE project award by the Veneto Region for the project “BIPBIP: a smart wearable system to prevent freezing in people with Parkinson's disease”, December 2019.

- Best National Social Innovation Project at National Prize for Innovation for the project “ADA - Assisting Daily life Activities, an ICT-based virtual coaching system to support elderly in activities of daily life”, December 2017.

INSTITUTIONAL SERVICES AT THE UNIVERSITY OF VERONA

- President of the information engineering teaching committee since October 2023
- Responsible for the teaching commission at the Department of Engineering for Innovation Medicine since March 2023
- President of the Quality Assurance Board (Presidio della Qualità) July 2017 – November 2021.
- Member of the Quality Assurance Board (Presidio della Qualità), February 2016 - June 2017.
- President of the self-evaluation commission and responsible for AVA (Autovalutazione, Valutazione periodica, Accreditamento) of the master course on Computer Science and Engineering (from 2014 to February 2016), in charge of managing the quality assurance procedures in accordance with the AVA system introduced with the Italian Law 20/12/10 n. 240.
- President of the self-evaluation commission and AVA responsible of the bachelor course on Computer Science (from 2011 to 2014), in charge of managing the quality assurance procedures in accordance with the AVA system introduced with the Italian Law 20/12/10 n. 240.
- President of the self-evaluation commission of the bachelor course on Computer Science (from 2009 to 2010), in charge of managing the quality assurance procedures and the redaction of the Rapporto di Autovalutazione (RAV).
- President of the Comitato Area CIVR 09 (from 2008 to 2010).
- Delegate of the Teaching Staff Council for the PhD degree in Computer Science at the Graduate School of Science Engineering and Medicine (from 2007 to 2009).

INSTITUTIONAL SERVICES AT THE ITALIAN NATIONAL AGENCY FOR THE EVALUATION OF UNIVERSITIES AND RESEARCH INSTITUTE (ANVUR)

Since July 2015, Graziano Pravadelli has collaborated with the Italian National Agency for the Evaluation of Universities and Research Institute (ANVUR) for the 09 Area.

He has served as “President” of the Commission of evaluation experts (CEV) for:

- The periodic accreditation of the Università degli Studi Link di Roma in 2024;

He has served as “Esperto di Sistema” for:

- The periodic accreditation of the Università degli Studi di Torino in 2023;
- The periodic accreditation of the Università Humanitas di Milano in 2023;
- The periodic accreditation of the Università degli Studi Internazionali di Roma in 2021;
- The periodic accreditation of the Università degli Studi di Roma 3 in 2020;
- The initial accreditation of eight new Universities in 2021.

He has served as “Esperto Disciplinare” for:

- The periodic accreditation of the Università degli Studi di Ferrara in 2016;
- The periodic accreditation of the Università degli Studi di Cassino e del Lazio Meridionale in 2017;
- The periodic accreditation of the Università degli Studi di Genova in 2018;
- The periodic accreditation of the Università degli Studi di Bolzano in 2019.

He has served as coordinator/president of the commission for:

- The initial accreditation of 7 masters in 2022;
- The initial accreditation of 2 bachelors and 4 masters in 2021;
- The initial accreditation of 1 bachelor and 4 masters in 2019;
- The initial accreditation of 7 bachelors and 4 masters in 2017;

He has served as member of the commission for:

- The initial accreditation of 4 masters in 2018;

Since January 2021 he is member of the Working Group “TECO-T Numeracy”.

COORDINATION OF RECENT PROJECTS WITH PEER REVIEW

1. UNISCO: An intelligent ecosystem to support the co-housing of vulnerable people
   Funding organization: Veneto Region, FSE 2023
   Period: February 2024-August 2025
2. WE.SMOOTH.PD: a WEarable-based System to MOnitor motor functions and levodopa levels for THerapy optimization in Parkinson's Disease
   Funding organization: Italian Ministry of University and Research, PRIN 2022
   Period: September 2023-September 2025
3. Interconnected Nord-Est Innovation Ecosystem - Spoke 5 (UNIVR)
   Funding organization: Italian Ministry of University and Research, National Recovery and Resilience Plan (NRRP), Mission 4, Component 2 Investment 1.4, funded from the European Union - NextGenerationEU.
   Period: September 2022-August 2025
4. Tele-monitoring, physical therapy, and nutrition in neurology (Parkinson's disease, chemotherapy-induced neurotoxicity, emotional eating disorders)
   Funding organization: Brain Research Foundation
   Period: May 2021-April 2024
5. Title: Smart-PUMP: a smart assistive system for monitoring and controlling motor fluctuations in Parkinsonians
   Funding organization: Veneto Region
   Period: July 2020 – June 2021
6. Title: BIPBIP: a wearable smart system to prevent freezing of gait in people affected by Parkinson's disease
   Funding organization: Veneto Region
   Period: October 2018 – September 2019

In addition, Graziano Pravadelli coordinated and participated in 20+ industrial and research projects at national and international levels concerning the design and verification of embedded and cyber-physical systems.

SCIENTIFIC SERVICES

- Chair of the IFIP Working Group 10.5 on design and engineering of electronic systems since 2020;
- Chair of the steering committee of IFIP/IEEE VLSI-SOC conference since 2020;
- Member of the steering committee of IFIP/IEEE VLSI-SOC conference since 2018;
- General chair of the IEEE International Conference on Digital Heath in 2024;
- Program chair of the IEEE International Conference on Digital Heath in 2023;
- Program chair of the IEEE Smart and Connected Health Symposium in 2022 and 2023;
- Member of the executive committee of ACM/IEEE DATE from 2020 to 2022;
- Track chair at IEEE ETS conference from 2022 to 2023;
- Track chair at ACM/IEEE DAC conference from 2019 to 2021;
- Track chair at ACM/IEEE DATE conference from 2018 to 2020 and from 2023 to 2024;
- Track chair at IFIPIEEE VLSI-SOC conference in 2015, 2016, 2017, 2019, 2020, 2021, 2023;
- General chair of IFIP/IEEE VLSI-SOC conference in 2018 and 2022;
- Member of the steering committee of IFIP/IEEE FDL conference since 2017;
- Finance chair of IFIP/IEEE FDL conference in 2017 and in 2018;
- Finance chair of ACM/IEEE NOCS conference in 2014,
- Member of the program committee of several international conferences;
- Referee activities for 50+ international conferences and journals;
- Organizer and speaker of tutorials and special sessions at several international conferences.

TEACHING ACTIVITIES

Teaching activities at Università degli Studi di Verona, Italy:

- Sensor networks and wearables, Bachelor in Human Centered Medical System Engineering, since 2023/2024;

- Operating systems, Bachelor in Human Centered Medical System Engineering, since 2023/2024;
- Operating systems, Bachelor in Computer Science from 2004/2005 to 2022/2023;
- Embedded operating systems, Master in Computer Engineering for Robotics and Smart Manufacturing since 2020/2021;
- System verification and testing, Master in Computer Engineering for Robotics and Smart Manufacturing since 2020/2021;
- Advanced operating systems, Master in Computer Science and Engineering: from 2004/2005 till 2019/2020;
- Design automation of embedded systems, Master in Computer Science and Engineering from 2009/2010 2019/2020;
- Informatics, Bachelor in Foreign Languages for tourism and international trading and Bachelor in Sport and exercise from 2008/2009 till 2013/2014.

Teaching activities at Università degli Studi di Trento, Italy:

- Operating systems, Bachelor in Computer Science: from 2014/2015 to 2016/2017.

TECHNOLOGY TRANSFER

Graziano Pravadelli is co-founder, co-owner and human resource manager at EDALab s.r.l. (http://www.edalab.it), an Italian SME whose mission consists of giving support for innovation and technology transfer in the development of IoT-based solutions. EDALab was founded on July 16, 2007 and it currently employs 13 persons in the development of IoT products and services mainly for smart building, smart manufacturing, healthcare and wellbeing.

In 2017, Graziano Pravadelli participated to the Veneto Startcup with “IF’s - ICT for families” for the development of ICT-based virtual coaching systems to support persons with physical and cognitive impairments. IF’s – ICT for families classified at the 5th position and was admitted to the “Premio Nazionale per l’Innovazione” (National Prize for Innovation), where it won the special mention “Best National Social Innovation Project” on December 01, 2017.

MOST RECENT PUBLICATIONS

1. Demarchi, M., Turetta, C., Pravadelli, G., Bombieri, B. (2024) Real-Time Multi-Person Identification and Tracking via HPE and IMU Data Fusion, Proc. of IEEE/ACM DATE 2024 (in press)
2. Bosio, A., Germiniani, S., Pravadelli,G., Traiola, M. (2024) ‘Syntactic and Semantic Analysis of Temporal Assertions to Support the Approximation of RTL Designs’ Journal of Electronic Testing, doi: 10.1007/s10836-024-06115-9
3. Ali, M.T., Turetta, C., Demrozi, F., Pravadelli, G. (2024) ICT-based solutions for Alzheimer’s Disease Care: A systematic review, IEEE Access, 12, 13944-13961, doi: 10.1109/ACCESS.2024.3356348
4. Kindt, P., Turetta, C., Demrozi, F., Masrur, A., Pravadelli, G. Chakraborty, S. (2024) WirelessEye – Seeing over WiFi Made Accessible. Proc. of IEEE PERCOM 2024, doi: 10.1109/PerComWorkshops59983.2024.10503162
5. Demrozi, F., Turetta, C., Pravadelli, G. (2024). SHPIA 2.0: An Easily Scalable, Low-Cost, Multi-purpose Smart Home Platform for Intelligent Applications. SN Computer Science 5 (1), 42, doi: 10.1007/s42979-023-02307-w.
6. Demrozi, F., Turetta, C., Pravadelli, G., et. al. (2023). A Low-Cost Wireless Body Area Network for Human Activity Recognition in Healthy Life and Medical Applications. IEEE Trans. on Emerging Topics in Computing, doi: 10.1109/TETC.2023.3274189.
7. Demrozi, F., Turetta, C., Pravadelli, G. (2023). Fostering Human Activity Recognition Workflows: An Open-Source Baseline Framework. Proc. of IEEE ICDH 2023, doi: 10.1109/ICDH60066.2023.00018
8. Turetta, C., Skenderi, G., Pravadelli, G., et. al. (2023). Towards Deep Learning-based Occupancy Detection Via WiFi Sensing in Unconstrained Environments. Proc. of IEEE/ACM DATE 2023, doi: 10.23919/DATE56975.2023.10137260
9. Bosio, A., Germiniani, S., Pravadelli, G., et. al. (2023). Exploiting assertions mining and fault analysis to guide RTL-level approximation. Proc. of IEEE/ACM DATE 2023, doi: 10.23919/DATE56975.2023.10136949
10. Cesari, P., Cristani, Pravadelli, G., et. al. (2023). Towards posture and gait evaluation through wearable-based biofeedback technologies. Electronics (Switzerland), 12(3) doi:10.3390/electronics12030644.
11. Germiniani, S., Pravadelli, G. Harm: a hint-based assertion miner. IEEE Trans. on CAD, 41(11), 4277-4288, doi: 10.1109/TCAD.2022.3197525.
12. Turetta, C., Demrozi, F., Kindt, P. H., Masrur, A., Pravadelli, G. (2022). Practical identity recognition using WiFi's channel state information. Proc. of IEEE/ACM DATE 2022, doi:10.23919/DATE54114.2022.9774772.

13. Turetta, C., Demrozi, F., & Pravadelli, G. (2022). A freely available system for human activity recognition based on a low-cost body area network. Proc. of IEEE COMPSAC 2022, doi:10.1109/COMPSAC54236.2022.00062.
14. Boldo, M., Bombieri, N., Centomo, Pravadelli, G., et al. (2022). Integrating wearable and Camera based monitoring in the Digital twin for Safety assessment in the Industry 4.0 era, Proc. of ISoLA 2022, doi:10.1007/978-3-031-19762-8_13.
15. Demrozi, F., & Pravadelli, G. (2022). SHPIA: A low-cost multi-purpose smart home platform for Intelligent applications. Proc. of IFIP IOT 2022, doi:10.1007/978-3-031-18872-5_13.
16. Demrozi, F., Chiarani, F., & Pravadelli, G. (2021). A low-cost BLE-based distance estimation, occupancy detection and counting system. Proc. of IEEE/ACM DATE 2021. doi:10.23919/DATE51398.2021.9474150.
17. Demrozi, F., Jereghi, M., & Pravadelli, G. (2021). Towards the automatic data annotation for human activity recognition based on wearables and BLE beacons. Proc. of IEEE INERTIAL 2021, doi:10.1109/INERTIAL51137.2021.9430457.
18. Demrozi, F., Serlonghi, N., Turetta, C., Pravadelli, C., & Pravadelli, G. (2021). Exploiting bluetooth low energy smart tags for virtual coaching. Proc. of IEEE WF-IoT 2021, 470-475. doi:10.1109/WF-IoT51360.2021.9595350.
19. Demrozi, F., Turetta, C., Chiarani, F., Kindt, P. H., & Pravadelli, G. (2021). Estimating indoor occupancy through low-cost BLE devices. IEEE Sensors Journal, 21(15), 17053-17063. doi:10.1109/JSEN.2021.3080632.
20. Demrozi, F., Pravadelli, G., Bihorac, A., Rashidi, P. (2020). Human activity recognition using inertial, physiological and environmental sensors: A comprehensive survey. IEEE Access, 8, 210816-210836. doi:10.1109/ACCESS.2020.3037715.

For the complete list of publications, see https://www.dimi.univr.it/?ent=persona&id=123&lang=en#tab-pubblicazioni

Verona, 29/04/24

Il sottoscritto, a conoscenza di quanto prescritto dall'art. 76 del d.p.r. 28 dicembre 2000 n. 445, sulla responsabilità penale cui può andare incontro in caso di falsità in atti e di dichiarazioni mendaci, nonché di quanto prescritto dall'art. 75 del d.p.r. 28 dicembre 2000 n. 445, sulla decadenza dai benefici eventualmente conseguenti al provvedimento emanato sulla base di dichiarazioni non veritiere, ai sensi e per gli effetti del citato d.p.r. n. 445/2000 e sotto la propria personale responsabilità dichiara che tutte le informazioni contenute nel proprio curriculum vitae sono veritiere

Graziano Pravadelli

Autorizzo il trattamento dei miei dati personali presenti nel cv ai sensi dell'art. 13 del Decreto Legislativo 30 giugno 2003, n. 196 "Codice in materia di protezione dei dati personali" e dell'art. 13 del GDPR (Regolamento UE 2016/679) e autorizzo la pubblicazione nella banca dati dell'area tematica ECM del portale della Regione del Veneto

Graziano Pravadelli