

Pietro Bosoni

Curriculum Vitae

✉ pietro.bosoni@unipv.it
in [pietro-bosoni](#)

Appointments

- 11/2023–Present **Assistant Professor (RTDa)**, *Department of Electrical, Computer and Biomedical Engineering*, University of Pavia, Italy
Project team member for European Union-funded project OnFoods (Research and innovation network on food and nutrition Sustainability, Safety and Security)
- 03/2022–10/2023 **Postdoctoral Research Fellow**, *Department of Electrical, Computer and Biomedical Engineering*, University of Pavia, Italy
Project team member for European Union-funded project BRAINTEASER (Bringing Artificial Intelligence home for a better care of amyotrophic lateral sclerosis and multiple sclerosis)
- 05/2022–06/2022 **Visiting Researcher**, *Department of Health Science and Technology*, Aalborg University, Denmark
Investigation of the potential of using personalized or hybrid approaches for glucose prediction in people with type 1 diabetes using Continuous Glucose Monitoring data
- 06/2017–10/2018 **Data Scientist**, *SAS Institute*, Milan, Italy
- 03/2016–06/2016 **Visiting Researcher**, *Department of Computer Science*, Brunel University London, United Kingdom. Erasmus+ Traineeship Programme
Investigation of the potential of combining unsupervised and supervised learning strategies for discovering systemic sclerosis subclasses

Academic Courses

- 10/2023–Present **Professor of Privacy Protection and Individual Rights in the Digital Dimension**, *Department of Law*, University of Pavia, Italy
Semester-long course offered to first-year MS students in Jurisprudence
- 10/2018–Present **Teaching Assistant of Artificial Intelligence in Medicine**, *Department of Electrical, Computer and Biomedical Engineering*, University of Pavia, Italy
Semester-long course offered to first-year MS students in Bioengineering. Course faculty: prof. Sacchi
- 10/2019–10/2023 **Tutor and Laboratory Assistant of Medical Informatics**, *Department of Electrical, Computer and Biomedical Engineering*, University of Pavia, Italy
Semester-long course offered to second-year BS students in Bioengineering. Course faculty: proff. Bellazzi, Quaglini, Sacchi

Education

- 10/2018–11/2021 **PhD in Health Technologies, Bioengineering and Bioinformatics**, University of Pavia, Italy
This research activity, described in the thesis 'Temporal data analytics for diabetes monitoring with application on pediatric and adult patients', is focused on the development and the implementation of temporal data analytics strategies in the AID-GM (Advanced Intelligent Distant - Glucose Monitoring) platform, turning patient-generated health data into relevant clinical information and making available to clinicians a complete overview of each patient's conditions as a decision support in their healthcare tasks. Supervisor: Prof. Lucia Sacchi.
- 10/2014–02/2017 **Master's Degree, Bioengineering (honors: cum laude)**, University of Pavia, Italy
Collaboration with the 'Intelligent Data Analysis' Group at the Brunel University London for the development of the thesis: 'Discovery of disease subclasses by combining supervised and unsupervised learning'. Supervisor: Prof. Riccardo Bellazzi, Prof. Allan Tucker
- 09/2011–09/2014 **Bachelor's Degree, Bioengineering**, University of Pavia, Italy
Collaboration with the Biomedical Informatics Laboratory 'Mario Stefanelli' in the European Union-funded project MobiGuide for the development of the thesis: 'MobiGuide Project: a supporting tool for pharmacological prescription'. Supervisor: Prof. Silvana Quaglini
- 09/2006–06/2011 **High School Diploma in Classical Studies**, Liceo P.Verri, Lodi, Italy

Awards

- 09/2022 Best Doctoral Dissertation Award 'Gianluigi Zanetti' by the Italian National Group of Bioengineering (GNB)
- 11/2021 Student Research Silver Award by the Diabetes Technology Society (DTS)
- 09/2017 Best Master Dissertation Award 'Mario Stefanelli' by the Italian National Group of Bioengineering (GNB)

Presentations in Conferences, Workshops and Seminars

- 05/2024 **'Fundamentals of Machine Learning for Healthcare'**, *OnFoods Mentorship Program, online*
- 11/2023 **'Temporal Data Analytics for Continuous Glucose Monitoring'**, *'Diabetes Technology in Clinical Practice' PhD Course, Danish Diabetes and Endocrine Academy - Aalborg, Denmark*
- 10/2022 **'Temporal data analytics for diabetes monitoring with applications in the Advanced Intelligent Distant - Glucose Monitoring (AID-GM) project'**, *'Digital Health for Diabetes and its complications' Workshop - University of Pavia, Italy*
Bosoni P.
- 11/2021 **Diabetes Technology Meeting (DTM 2021)**, *online*
Bosoni P, Sacchi L, Calcaterra V, Larizza C, Bellazzi R. Relationship between Time in Range, Glycemic Variability Metrics and Daily Scan Rate in Children with Type 1 Diabetes

- 06/2021 **VII Congress of the National Group of Bioengineering (GNB)**, *University of Trieste, online*
Bosoni P, Meccariello M, Calcaterra V, Larizza C, Sacchi L, Bellazzi R. Blood glucose prediction from Flash Glucose Monitoring and Fitbit data: a deep learning approach
- 03/2021 **2021 International Global Health and Technology Conference**, *'Health Data Science' Workshop, Students for Global Health Bristol, online*
Bellazzi R, Bosoni P, Dagliati A, C, Sacchi L. Machine Learning Methods to Predict Diabetes Complications
- 08/2020 **International Conference on Artificial Intelligence in Medicine (AIME 2020)**, *University of Minnesota, online*
Bosoni P, Meccariello M, Calcaterra V, Larizza C, Sacchi L, Bellazzi R. Deep Learning Applied to Blood Glucose Prediction from Flash Glucose Monitoring and Fitbit Data
- 06/2016 **IEEE 29th International Symposium on Computer-Based Medical Systems (CBMS 2016)**, *Queen's University Belfast, Northern Ireland*
Bosoni P, Tucker A, Bellazzi R, Nihtyanova SI, Denton CP. Combining Unsupervised and Supervised Learning for Discovering Disease Subclasses

Journal Publications

- 2024 **Pala D, Petrini G, Bosoni P, Larizza C, Quaglini S, Lanzola G**, *Smartphone applications for nutrition Support: A systematic review of the target outcomes and main functionalities*, *International Journal of Medical Informatics*. 2024 Apr 1;184:105351
- 2023 **Larizza C, Bosoni P, Quaglini S, Chasseur M, Bevolo V, Zuccotti G, Calcaterra**, *An application to support lifestyle improvement in children with obesity*, *International Journal of Medical Informatics*. 2023 Sep 1;177:105140
- 2023 **Tavazzi E, Longato E, Vettoretti M, Aidos H, Trescato I, Roversi C, Martins AS, Castanho EN, Branco R, Soares DF, Guazzo A, Birolo G, Pala D, Bosoni P, Chiò A, Manera U, de Carvalho M, Miranda B, Gromicho M, Alves I, Bellazzi R, Dagliati A, Fariselli P, Madeira SC, Di Camillo B**, *Artificial intelligence and statistical methods for stratification and prediction of progression in amyotrophic lateral sclerosis: A systematic review*, *Artificial Intelligence in Medicine*. 2023 Aug 1;142:102588
- 2021 **Calcaterra V, Bosoni P, Dilillo D, Mannarino S, Fiori L, Fabiano V, Carlucci P, Di Profio E, Verduci E, Mameli C, Pelizzo G, Zoia E, Sacchi L, Larizza C, Zuccotti G**, *Impaired Glucose-Insulin Metabolism in Multisystem Inflammatory Syndrome Related to SARS-CoV-2 in Children*, *Children*. 2021 May;8(5):384
- 2021 **Bosoni P, Calcaterra V, Tibollo V, Malovini A, Zuccotti G, Mameli C, Sacchi L, Bellazzi R, Larizza C**, *Exploring the inter-subject variability in the relationship between glucose monitoring metrics and glycated hemoglobin for pediatric patients with type 1 diabetes*, *Journal of Pediatric Endocrinology and Metabolism*. 2021 May 1;34(5):619–25

- 2021 **Calcaterra V, Bosoni P, Sacchi L, Zuccotti GV, Mannarino S, Bellazzi R, Larizza C**, *Continuous Glucose and Heart Rate Monitoring in Young People with Type 1 Diabetes: An Exploratory Study about Perspectives in Nocturnal Hypoglycemia Detection*, *Metabolites*. 2021 Jan;11(1):5
- 2020 **Salvi E, Bosoni P, Tibollo V, Kruijver L, Calcaterra V, Sacchi L, Bellazzi R, Larizza C**, *Patient-Generated Health Data Integration and Advanced Analytics for Diabetes Management: The AID-GM Platform*, *Sensors*. 2020 Jan;20(1):128
- 2018 **Alyousef AA, Nihtyanova S, Denton C, Bosoni P, Bellazzi R, Tucker A**, *Consensus Clustering Classification to Identify Subclasses and Predict Disease*, *J Healthc Inform Res*. 2018 Jul 30;2(4):402–22

Conference Publications

- 2023 **Buonocore TM, Bosoni P, Nicora G, Vazifehdan M, Bellazzi R, Parimbelli E, Dagliati A**, *Predicting and Explaining Risk of Disease Worsening Using Temporal Features in Multiple Sclerosis*, Working Notes of the Conference and Labs of the Evaluation Forum (CLEF 2023) - Intelligent Disease Progression Prediction at CLEF (iDPP@CLEF). Thessaloniki, Greece: CEUR; 2023. p. 1210–8. (CEUR Workshop Proceedings; vol. 3497)
- 2023 **Vazifehdan M, Bosoni P, Pala D, Tavazzi E, Bergamaschi R, Bellazzi R, Dagliati A**, *Longitudinal Missing Data Imputation for Predicting Disability Stage of Patients with Multiple Sclerosis*, Vettoretti M, Tavazzi E, Longato E. 18th Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics (CIBB); 2023
- 2023 **Pala D, Zagami G, Strusi C, Bosoni P, Larizza C, Bellazzi R, Dagliati A**, *Land Use Regression on Interpolated Urban Graphs to Assess Air Pollution Personal Exposure for Multiple Sclerosis Patients*, Vettoretti M, Tavazzi E, Longato E, editors. 18th Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics (CIBB); 2023
- 2022 **Bosoni P, Sacchi L, Calcaterra V, Larizza C, Bellazzi R**, *Relationship between Time in Range, Glycemic Variability Metrics and Daily Scan Rate in Children with Type 1 Diabetes*, 2021 Diabetes Technology Meeting (DTM) Abstracts. SAGE Publications Inc; 2022. p. A525
- 2020 **Bosoni P, Meccariello M, Calcaterra V, Larizza C, Sacchi L, Bellazzi R**, *Applied to Blood Glucose Prediction from Flash Glucose Monitoring and Fitbit Data*, Michalowski M, Moskovitch R, editors. Artificial Intelligence in Medicine. Cham: Springer International Publishing; 2020. p. 59–63. (Lecture Notes in Computer Science)
- 2020 **Bosoni P, Meccariello M, Calcaterra V, Larizza C, Sacchi L, Bellazzi R**, *Blood glucose prediction from flash glucose monitoring and Fitbit data: a deep learning approach*, Accardo A, Brun F, Marcegaglia S, Pedrizzetti G, editors. Seventh National Congress of Bioengineering Proceedings. Patron Editore; 2020. p. 465-8

2019 **Alsaid Alyousef A, Nihtyanova S, Denton CP, Bosoni P, Bellazzi R, Tucker A**, *Class Multi-Label Classification to Identify Subclasses of Disease for Improved Prediction*, 2019 IEEE 32nd International Symposium on Computer-Based Medical Systems (CBMS); 2019. p. 535–8

2016 **Bosoni P, Tucker A, Bellazzi R, Nihtyanova SI, Denton CP**, *Supervised Learning for Discovering Disease Subclasses*, 2016 IEEE 29th International Symposium on Computer-Based Medical Systems (CBMS); 2016. p. 225–6

Peer Review

- Member of the CIBB 2024 Program Committee (19th Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics), Benevento, Italy, 4-6 September 2023
- Member of the CIBB 2023 Program Committee (18th Conference on Computational Intelligence Methods for Bioinformatics and Biostatistics), Padova, Italy, 6-8 September 2023
- Since 2018 I have reviewed several manuscripts both for Journals (including Artificial Intelligence in Medicine, BMC Medical Informatics and Decision Making, Computer Methods and Programs in Biomedicine, Journal of Biomedical Informatics, International Journal of Telemedicine and Applications, PeerJ Computer Science) and for Conferences.

Pavia, 10/06/2024