## PARIMBELLI ENEA curriculum vitae

#### **WORKING EXPERIENCE**

ASSISTANT PROFESSOR - UNIVERSITY OF PAVIA (APR 2021 - ongoing)

Tenure-track appointment as assistant professor of biomedical engineering at the department of electrical, computer and biomedical engineering of the University of Pavia. Research coordination duties include WP4 leader for the PERISCOPE project (H2020 GA101016233), TF2 leader for the CAPABLE project (H2020 GA875052), unipv unit coordinator for WP3 and WP8 of DHEAL-COM (PNRR PNC funded, 2023) project, PMO support to Activity 1 of Fit4MedRob (PNRR funded, 2023) project. Teaching includes "telemedicine foundations", "health informatics" and "AI in medicine" for master students in the bioengineering MEng, Medicine MD, and MEET (Medicine Enhanced by Engineering Technologies) master programs.

ADJUNCT PROFESSOR - UNIVERSITY OF OTTAWA (OCT 2022 - OCT 2025)

Appointed as adjunct faculty (research) at the Telfer school of management at the University of Ottawa, ON, Canada. 3-year appointment, renewable.

PROFESSOR – DATA-DRIVEN HEALTHCARE - UNIVERSITY OF PAVIA (FEB 2023 – JUN 2023) Professor for the EC-funded international master XAIM (eXplainable AI for Healthcare Management) program for the mandatory course data-driven healthcare.

POST-DOC RESEARCH FELLOW - UNIVERSITY OF PAVIA (SEP 2019 - SEP 2020)

Post-doctoral fellow at Bio-Medical informatics laboratory "Mario Stefanelli". Decision support for medical professionals and patients in distributed environments. Project team member for Horizon 2020 projects CAPABLE (Cancer Patients Better Life Experience, H2020 GA875052) and PERISCOPE (Pan-European Response to the ImpactS of COVID-19 and future Pandemics and Epidemics, H2020 GA101016233). Demo Manager and leader of task force 2 since June 2020, designing and developing the 1st and 2<sup>nd</sup> POCs of the CAPABLE system in the context of EC project reviews.

POST-DOC RESEARCH FELLOW - UNIVERSITY OF OTTAWA (AUG 2017 - AUG 2019)

Post-doc fellow at the Telfer school of management at the University of Ottawa. Involved in research on computer-supported collaborative work in interdisciplinary healthcare teams, medical data mining, motivational patient assistant (targeting engagement of atrial fibrillation patients to comply to anticoagulant treatment) and computerized guidelines development for multimorbid patients.

LECTURER - AI IN MEDICINE - UNIVERSITY OF OTTAWA (2019 WINTER TERM)

Winter term appointment as teaching faculty at the Ottawa-Carleton Institute for Computer Science (OCICS). Developing and teaching the doctoral-level course CSI5139 - "Special Topics in Computer Science: Artificial Intelligence in Medicine".

LECTURER - BUSINESS ANALYTICS - UNIVERSITY OF OTTAWA (2018 FALL TERM)

Fall term appointment as teaching faculty at the Telfer school of management. Teaching ADM2302 - Business Analytics to undergraduates enrolled in the second year BCom in Management Information Systems and Analytics.

POST-DOC RESEARCH FELLOW - UNIVERSITY OF PAVIA (NOV 2015 - AUG 2017)

Post-doctoral fellow at Bio-Medical informatics laboratory "Mario Stefanelli". Development of methods and systems for patient-centered telemedicine and medical decision support. Involved in the MobiGuide (FP7 GA287811) and PULSE (H2020 GA727816) projects.

CONTRACT PROFESSOR - UNIVERSITY OF WESTERN PIEDMONT (MAR 2017 – JUN 2017 and MAR 2020 – JUN 2020)

Contract professor for the 48-hours semester-long course "Web programming fundamentals" offered to third-year BS students in computer science in Vercelli.

VISITING RESEARCH SCHOLAR – UNIVERSITY OF PENNSYLVANIA (APR 2014 – OCT 2014) Visiting scholar at Department of Biostatistics, Epidemiology and Informatics (DBEI) in the Perelman School of Medicine. Research on novel approaches to patient preferences elicitation for use in CDSS.

PHD STUDENT AND MOBIGUIDE TEAM MEMBER – UNIVERSITY OF PAVIA (NOV 2012-OCT 2015) Team member of the EU-funded project "MobiGuide, guiding patients anytime, everywhere" (FP7 GA287811). Involved in research, design and implementation activities of the UNIPV core components including: caregiver web interfaces, clinical shared decision modules, data analysis components and utility elicitation tools.

JUNIOR CONSULTANT – NTT DATA EMEA (formerly Value Team spa) (SEP 2011 – JUN 2012) Team member of the "MORe (Operational monitoring of retail customers)" and "Credit management and analysis" projects for a major Italian enterprise in the Oil&Gas industry. Requirement engineering, data warehouse design and dashboard tools development.

#### **EDUCATION**

PHD, 2012-2016 Bioengineering and Bionformatics, Biomedical informatics lab "Mario Stefanelli", Department of Electrical, Computer and Biomedical Engineering, University of Pavia. Supervisor: Prof. Silvana Quaglini

MEng, 2009-2011 Computer Engineering and Service Science, University of Pavia. (110/110 cum Laude)

BEng, 2006-2009 Computer Engineering, University of Pavia. (110/110 cum Laude)

#### FUNDING

CO-PI of the PRIN PNRR 2022 (Italian Ministry of Research) project "GluToTrack - A Participatory Approach to Support Glucose Tolerance Tracking in Real-Life of Patients with Type 2 Diabetes", Coordinator of the UNIPV unit. Overall funded sum: 244.716 eur, UNIPV unit funds: 125.643 eur

CHAIR of the winter school "Data Driven Healthcare Transformation", University of Pavia, Feb 2024. Acquired funding (UNIPV internal, competitive tender, and Erasmus+ BIP program): 5000 eur + 7000 eur

CHAIR of the International Summer School of Advanced Graduate Studies (ISAGS) on "Soft Skills for PhDs and Early Career Researchers", University of Pavia, Jul 2024. Acquired funding (UNIPV internal, competitive tender): 8600 eur

## **SERVICE TO PROFESSION**

## **Committees**

MEMBER OF THE PHD ADMISSION COMMITTEE (since 2022), of the Italian National PhD program in AI, health&life sciences pillar. University Campus Bio-Medico Roma (UCBM) XXXVIII and XXXIX cycle MEMBER OF THE PHD GRADUATION COMMITTEE (2024) of the PhD program in Biomedical, Electric and Systems Engineering of the University of Bologna (UNIBO). Candidates: Sachal Hussain, Eugenio Ricci, Riccardo Scheda. Defense date June 4<sup>th</sup> 2024, Cesena, Italy

DOCTORAL CONSORTIUM COMMITTEE MEMBER AND MENTOR (since 2022) for the Artificial Intelligence in Medicine (AIME) conference, both in the European and North American chapters. Halifax 2022, Portoroz 2023, Salt Lake City 2024

DOCTORAL CONSORTIUM COMMITTEE MEMBER AND MENTOR (since 2023) for the World Conference on eXplainable Artificial Intelligence. Lisboa 2023, Malta 2024

## Scientific societies and consortia

BOARD MEMBER (since 2017) of the society for Artificial Intelligence in Medicine <a href="http://aimedicine.info">http://aimedicine.info</a>
BOARD MEMBER (since 2023) of the Italian Scientific Society for Biomedical Informatics (SIBIM)
<a href="https://www.sibim.it/?page">https://www.sibim.it/?page</a> id=17

MEMBER (since 2023) of the Consortium for the Clinical Characterization of COVID-19 by HER (4CE) https://covidclinical.net

## **Conferences**

SCIENTIFIC PROGRAM CHAIR of the AIME2024 conference, Salt Lake City, USA, Jul 9-12 2024 SPECIAL TRACK CO-CHAIR and PC MEMBER of the International Symposium on Computer-Based Medical Systems (CBMS2024), Multimodal Learning in Biomedical Applications, Guadalajara, Mexico, 26-28 Jun 2024

SPECIAL TRACK CO-CHAIR and PC MEMBER of the 2<sup>nd</sup> world conference on explainable artificial intelligence (xAI-2024), Calibrating trust in XAI, Valletta, Malta, 17-19 Jul 2024

PC MEMBER of the 38<sup>th</sup> Conference on Artificial Intelligence (AAAI-24), Vancouver, CA, Feb 20-27 2024 PC MEMBER of the 12th IEEE International Conference on Healthcare Informatics (ICHI 2024), Orlando, USA, 3-6 Jun 2024

CO-ORGANIZER of the Italian National PhD program in AI health&life sciences summer schools 2022 and 2024 editions. Rome, IT, University Campus Bio-Medico

CHAIR of 13th Knowledge Representation for Health Care workshop (KR4HC), Portoroz, SI, Jun 16 2023. TUTORIAL CHAIR member of the organizing committee of AIME2022 conference.

DOCTORAL CONSORTIUM tutor (since 2022) for the AIME conference DC.

SCIENTIFIC COMMITTEE member of LivingNER Shared Task(IberLEF2022) <a href="https://temu.bsc.es/livingner/">https://temu.bsc.es/livingner/</a> SPC MEMBER of eXplainable AI in Healthcare (XAI-Healthcare 2022) @IEEE ICHI 2022 -Rochester SENIOR PC MEMBER for AIME2021, AIME2022, AIME2023 conferences.

PC MEMBER for W3PHAI'20 International Workshop on Health Intelligence In conjunction with AAAI2020. PC MEMBER for AIME2017, 2019 and 2020 conferences, and reviewer for the corresponding AIIM Special Issue.

PC MEMBER for the Workshop on Computer based processes and algorithms for biomedicine and life quality improvement (CBPBL), in conjunction with IEEE BIBM 2017, Kansas City, USA, November 13 - 16, 2017.

REVIEWER for AMIA 2015-2018, AIME2015, W3PHAI'19 and NI2016 international conferences.

## **Journals**

EDITORIAL BOARD MEMBER of Journal of Biomedical Informatics (JBI), Elsevier, since 2024

REVIEWER (since 2022) for Nature Digital Medicine (npj) journal.

REVIEWER (since 2021) for Sensors journal.

REVIEWER (since 2021) for Patterns journal.

REVIEWER (since 2021) for Biocybernetics and Biomedical Engineering journal.

REVIEWER (since 2020) for Briefings in bioinformatics journal.

REVIEWER (since 2018) for BMC Medical Informatics and Decision Making journal.

REVIEWER (since 2017) for the Artificial Intelligence in Medicine journal.

REVIEWER (since 2017) for the Journal of Healthcare Informatics Research.

REVIEWER (since 2016) for the Journal of Biomedical Informatics.

REVIEWER (since 2016) for the Journal of Forensic and Legal Medicine special issue Big data in medicine and forensic science.

REVIEWER (since 2016) for the International Journal of Telemedicine and Applications.

REVIEWER (since 2015) for the International Journal of Medical Informatics.

#### **AWARDS**

BEST PAPER AWARD - User Modeling and User-Adapted Interaction

2017 James Chen Annual Award for Best UMUAI Paper for "MobiGuide: a personalized and patient-centric decision-support system and its evaluation in the atrial fibrillation and gestational diabetes domains"

## OUTSTANDING REVIEWER, AIME 2017 conference, Vienna

Mentioned among the top 8 most helpful reviewers based on the authors' anonymous feedback.

## NOMINEE for the AMIA 2017 DOCTORAL DISSERTATION AWARD

Selected as the nominee among the University of Pavia PhD program graduates of 2016. Made it to the semi-final round consisting of 19 selected candidates.

## BEST DOCTORAL DISSERTATION AWARD "Marco Ramoni"

Awarded by the Italian National Bioengineering Group (GNB) for the thesis: "Personalization of clinical decision support systems in the context of shared decision making". Sep 2016.

## IEEE EXEMPLARY STUDENT BRANCH AWARD

Awarder to the University of Pavia IEEE student branch where I was involved as the area manager for biomedical engineering. Awarded Dec 2016

#### **BEST POSTER**

Best Poster of the evidence based medicine session. Lanzola G., Quaglini S., Parimbelli E., Cavallini A., Tartara E., Micieli G., A new functionality for the SUN-Lombardia Registry: Monitoring Patients' Enrollment and Performance Indicators. Italian Stroke Forum 2012.

#### STUDENT AWARD

Best 1<sup>st</sup> year computer engineering students (2007). AICA (Italian association for informatics and computing)

## **HOBBIES AND INTERESTS**

Scuba diving, freediving, spearfishing and fish (mostly members of the Chiclidae family). Volleyball and beach-volley - FIPAV (Italian volleyball federation) player. Modern and contemporary American poetry.

## **PUBLICATIONS**

ORCID: 0000-0003-0679-828X, Scopus id 57195936697, WoS ResearcherID AAE-2140-2020

# **International Journals**

- 1. Crema C. et al. "Advancing Italian biomedical information extraction with transformers-based models: Methodological insights and multicenter practical application", JBI, 2023
- 2. Fraterman et al. "An eHealth App (CAPABLE) Providing Symptom Monitoring, Well-Being Interventions, and Educational Material for Patients With Melanoma Treated With Immune Checkpoint Inhibitors: Protocol for an Exploratory Intervention Trial", JMIR Research Protocols, 2023
- 3. Buonocore T, ... and Parimbelli E., "Localizing in-domain adaptation of transformer-based biomedical language models", JBI, 2023
- 4. Lanzola g., Polce F., Parimbelli E. et al. "The Case Manager: An Agent Controlling the Activation of Knowledge Sources in a FHIR-Based Distributed Reasoning Environment", ACI, 2023.
- 5. Podrecca C., Parimbelli E. et al, "A comparative analysis of the effects of containment policies on the epidemiological manifestation of the COVID-19 pandemic across nine European countries", Scientific Reports, 2023.
- 6. Cabitza F. et al., "Painting the black box white: experimental findings from applying XAI to an ECG reading setting", Machine Learning and Knowledge Extraction, 2023.
- 7. Nicora G. et al., "A synthetic dataset of Liver Disorder patients", Data in brief, 2023.
- 8. P. Flodin et al., "Differential impact of the COVID-19 pandemic on primary care utilization related to common mental disorders in four European countries: a retrospective observational study", Front. In Psychiatry, 2023.
- 9. E. Parimbelli et al., "Why did AI get this one wrong? Tree-based explanations of machine learning model predictions", JBI, 2023.

- 10.E. Parimbelli et al., "A review of AI and Data Science support for cancer management," Artif. Intell. Med., 2021.
- 11.E. Parimbelli et al., "Cost-utility of two minimally-invasive surgical techniques for operable oropharyngeal cancer: transoral robotic surgery versus transoral laser microsurgery," BMC Health Serv. Res., 2021.
- 12.M. Michalowski et al., "A health elearning ontology and procedural reasoning approach for developing personalized courses to teach patients about their medical condition and treatment," Int. J. Environ. Res. Public Health, 2021.
- 13.E. Parimbelli et al., "Quality of life and health-related utility after trans-oral surgery for head and neck cancers," Health Qual. Life Outcomes, vol. 19, no. 1, 2021.
- 14.P M Reardon, E Parimbelli, S Wilk, W Michalowski, K Murphy, J Shen, B Herritt, B Gershkovich, P Tanuseputro, K Kyeremanteng. "Incorporating Laboratory Values Into a Machine Learning Model Improves In-Hospital Mortality Predictions After Rapid Response Team Call". Critical Care Explorations. 2019
- 15. Salvi E, Parimbelli E, Quaglini S, Sacchi L. "Eliciting and Exploiting Utility Coefficients in an Integrated Environment for Shared Decision-Making". *Methods of Information in Medicine*. 2019
- 16. Pala D, Pagán J, Parimbelli E, Rocca MT, Bellazzi R, Casella V. "Spatial Enablement to Support Environmental, Demographic, Socioeconomics, and Health Data Integration and Analysis for Big Cities: A Case Study With Asthma Hospitalizations in New York City". Front Med. 2019
- 17.Peleg M, Michalowski W, Wilk S, Parimbelli E, Bonaccio S, O'Sullivan D, Michalowski M, Quaglini S, Carrier M. "Ideating Mobile Health Behavioral Support for Compliance to Therapy for Patients with Chronic Disease: A Case Study of Atrial Fibrillation Management". *Journal of medical systems*, 2018
- 18. Parimbelli E, Marini S, Sacchi L, Bellazzi R. "Patient similarity for precision medicine: A systematic review". *Journal of Biomedical Informatics*, 2018
- 19. Parimbelli E., Bottalico B., Losiouk E., Tomasi M., Santosuosso A., Lanzola G., Quaglini S., Bellazzi R. "Trusting telemedicine: a discussion on risks, safety, legal implications and liability of involved stakeholders". *Int J Med Inform*, 2018
- 20. Parimbelli E., Pistarini C., Fizzotti G., Rognoni C., Olivieri G., Quaglini S. "Computer-Assessed Preference-Based Quality of Life in Patients with Spinal Cord Injury". *BioMed Research International neurology*, Aug 2017.
- 21.M. Peleg, Y. Shahar, S. Quaglini, A. Fux, G. García-Sáezd, A. Goldstein, M. E. Hernando, D. Klimov, I. Martínez-Sarriegui, C. Napolitano, E. Parimbelli, M. Rigla, L. Sacchi, E. Shalom, P. Soffer, "MobiGuide: a personalized and patient-centric decision-support system and its evaluation in the atrial fibrillation and gestational diabetes domains," *User Model User-adap, special Issue on Patient-centered Personalized eHealth*, Jun 2017.
- 22.M. Peleg, Y. Shahar, S. Quaglini, T. Broens, R.Budasu, N. Fung, A.Fux, G. García-Sáezd, A. Goldstein, A. Gonzalez-Ferrer, H. Hermens, M. E. Hernando, V. Jones, D. Klimov, D. Knoppel, N. Larburu, C. Marcos, I. Martínez-Sarriegui, C. Napolitano, A. Pallas, A. Palomares, E. Parimbelli, B. Pons, M. Rigla, L. Sacchi, E. Shalom, P. Soffer, B. vasn Schooten, "Assessment of a Personalized and Distributed Patient Guidance System," *Int J Med Inform*, May 2017.
- 23.A. Shabo, M. Peleg, E. Parimbelli, S. Quaglini, and C. Napolitano, "Interplay between Clinical Guidelines and Organizational Workflow Systems: Experience from the MobiGuide project," *Methods Inf Med*, Dec 2016.
- 24.S. Rubrichi, C. Rognoni, L. Sacchi, E. Parimbelli, C. Napolitano, A. Mazzanti, and S. Quaglini, "Graphical Representation of Life Paths to Better Convey Results of Decision Models to Patients," *Medical Decision Making*, Jan 2015.
- 25. Parimbelli E, Sacchi L, Bellazzi R. "Decision support through data integration: strategies to meet the big data challenge" *European Journal of Biomedical Informatics*, Jun 2016.
- 26.E. Parimbelli, L. Sacchi, S. Rubrichi, A. Mazzanti, and S. Quaglini, "UceWeb: a Web-based Collaborative Tool for Collecting and Sharing Quality of Life Data," *Methods Inf Med*, vol. 53, no. 6, Nov 2014.
- 27.L. Sacchi, S. Rubrichi, C. Rognoni, S. Panzarasa, E. Parimbelli, A. Mazzanti, C. Napolitano, S. G. Priori, and S. Quaglini, "From decision to shared-decision: Introducing patients' preferences into clinical decision analysis," *Artif Intell Med*, Nov 2014.
- 28.G. Lanzola, E. Parimbelli, G. Micieli, A. Cavallini, and S. Quaglini, "Data Quality and Completeness in

a Web Stroke Registry as the Basis for Data and Process Mining," *Journal of Healthcare Engineering*, vol. 5, no. 2, pp. 163–184, Jun 2014.

## **Preprints/Under evaluation**

- Peracchio L, Nicora G, Parimbelli E, et al. "Evaluation of Predictive Reliability to Foster Trust in Artificial Intelligence. A case study in Multiple Sclerosis". arxiv 2024 Feb; https://doi.org/10.48550/arXiv.2402.17554
- 2. Bergomi L, Buonocore TM, ... and Parimbelli E, "Reshaping Free-Text Radiology Notes Into Structured Reports With Generative Transformers". arxiv 2024 Mar; https://doi.org/10.48550/arXiv.2403.18938
- 3. Ratul MAR, Mozaffari MH, Lee W-S, Parimbelli E. "Skin Lesions Classification Using Deep Learning Based on Dilated Convolution". bioRxiv. 2020 Jun 5;860700; https://doi.org/10.1101/860700

## **International Conferences**

- 1. L. Peracchio, G. Nicora, TM. Buonocore, R. Bellazzi, E. Parimbelli, "Do you trust your model explanations? An analysis of XAI performance under dataset shift". *AIME, Salt Lake City, UT, USA,* 2024
- 2. E. Parimbelli et al., "CAncer PAtients Better Life Experience (CAPABLE) First Proof-of-Concept Demonstration". *AIME, Porto*, 2021
- 3. M. Gabetta, A. Alloni, F. Polce, G. Lanzola, E. Parimbelli, and N. Barbarini, Development of a FHIR Layer on Top of the OMOP Common Data Model for the CAPABLE Project". 2021
- 4. E. Parimbelli, Szymon Wilk, Dympna O'Sullivan, Stephen Kingwell, Wojtek Michalowski, Martin Michalowski. "How Do Spinal Surgeons Perceive Impact of Factors Used in Post-Surgical Complication Risk Scores?" *AMIA 2019 Annual Symposium, Washington DC*, 2019, pp. 699-706
- 5. Salvi E, Parimbelli E, Sacchi L, Quaglini S, Maggi E, Duchoud L, et al. "Towards the Economic Evaluation of Two Mini-invasive Surgical Techniques for Head&Neck Cancer: A Customizable Model for Different Populations". *AIME, Poznan,* June 2019.
- 6. Pala D, Holmes J, Pagàn J, Parimbelli E, Rocca MT, Casella V, et al. "Agent-Based Models and Spatial Enablement: A Simulation Tool to Improve Health and Wellbeing in Big Cities". In: Riaño D, Wilk S, ten Teije A, editors. *AIME, Poznan*, June 2019.
- 7. Parimbelli E., Wilk S., Kingwell S., Andreev P., Michalowski W., "Shared Decision-Making Ontology for a Healthcare Team Executing a Workflow, an Instantiation for Metastatic Spinal Cord Compression Management". *AMIA 2018 annual symposium, San Francisco*, November 2018.
- 8. W. Michalowski, M. Peleg, Sz. Wilk, S. Bonaccio, D. O'Sullivan, M. Michalowski, E. Parimbelli, M. Carrier, "Helping Atrial Fibrillation Patients with Adherence to Anticoagulation Therapy: Design Framework and Interventional Strategies". *INFORMS Annual Meeting, Phoenix*, November 2018.
- Parimbelli E., Pala D., Bellazzi R., Vera-Munoz C., Casella V., "Integrating Environmental Data, Citizen Science and Personalized Predictive Modeling to support Public Health in Cities: the PULSE WebGIS".
   32<sup>nd</sup> AAAI conference on artificial intelligence, Health Intelligence, New Orleans, February 2018.
- 10. Roveda G, Koledoye MA, Parimbelli E, Holmes JH. "Predicting clinical outcomes in patients with traumatic bleeding: A secondary analysis of the CRASH-2 dataset." *IEEE 3rd International Forum on Research and Technologies for Society and Industry (RTSI)*, Modena, September 2017.
- 11. Salvi E, Parimbelli E, Basadonne A, Viani N, Cavallini A, Micieli G, et al. "Exploring IBM Watson to Extract Meaningful Information from the List of References of a Clinical Practice Guideline". *AIME* 2017, Vienna, June 2017.
- 12. Salvi E, Parimbelli E, Emalieu G, Quaglini S, Sacchi L. "A Platform for Targeting Cost-Utility Analyses to Specific Populations". *AIME 2017*, Vienna, June 2017.
- 13.E. Parimbelli, L. Sacchi, and R. Bellazzi, "Decision support through data integration: strategies to meet the big data challenge," in *Proceedings of the 16th International HL7 Interoperability Conference IHIC 2016*, Genova, 2016.
- 14.E. Parimbelli, L. Sacchi, R. I. Budasu, C. Napolitano, M. Peleg, and S. Quaglini, "The role of nurses in e-health: the MobiGuide project experience," in *Nursing Informatics 2016*, Geneva, June 2016.
- 15. Parimbelli E, Fizzotti G, Pistarini C, Rognoni C, Quaglini S. "Quality of Life Measurements in Spinal Cord Injury Patients". *Stud Health Technol Inform*;216:998. *MEDINFO 2015*, Sao Paulo, Aug 2015.
- 16.E. Parimbelli, S. Quaglini, R. Bellazzi, JH. Holmes, "Collaborative Filtering for Estimating Health Related Utilities in Decision Support Systems". *AIME 2015*, Pavia, June 2015.

- 17.L. Sacchi, E. Parimbelli, S. Panzarasa, N. Viani, E. Rizzo, C. Napolitano, et al. "Combining Decision Support System-Generated Recommendations with Interactive Guideline Visualization for Better Informed Decisions". *AIME 2015*, Pavia, June 2015.
- 18.E. Parimbelli, S. Quaglini, C. Napolitano, S. Priori, R. Bellazzi, and J. H. Holmes, "Use of Patient Generated Data from Social Media and Collaborative Filtering for Preferences Elicitation in Shared Decision Making," in *AAAI Fall Symposium Series*, Arlington, November 2014.
- 19.A. González-Ferrer, M. Peleg, E. Parimbelli, E. Shalom, CM. Lagunar, G. Klebanov, I. Martínez-Sarriegui, N. Fung, and T. Broens, "Use of the Virtual Medical Record Data Model for Communication among Components of a Distributed Decision-Support System," in *Proceedings of 2nd IEEE Biomedical and Health Informatics International Conference*, Valencia, 2014.
- 20.L. Sacchi, C. Rognoni, S. Rubrichi, S. Panzarasa, and S. Quaglini, "From Decision to Shared-Decision: Introducing Patients' Preferences in Clinical Decision Analysis A Case Study in Thromboembolic Risk Prevention," in AIME2013, Murcia, Spain.
- 21.S. Quaglini, Y. Shahar, M. Peleg, S. Miksch, C. Napolitano, M. Rigla, A. Pallàs, E. Parimbelli, and L. Sacchi, "Supporting shared decision making within the MobiGuide project," *AMIA Annu Symp Proc*, vol. 2013, pp. 1175–1184, 2013.
- 22.G. Lanzola, S. Quaglini, E. Parimbelli, A. Cavallini, E. Tartara, and G. Micieli, "Monitoring Patients' Enrolment and Performance Indicators in a Web Stroke Register," in *24th International Conference of the European Federation for Medical Informatics Quality of Life through Quality of Information*, Pisa, 2012

## ATTENDANCE AT NATIONAL AND INTERNATIONAL SCIENTIFIC CONFERENCES

UiB Pandemic Conference. Long-Term Consequences of the COVID-19 Pandemic for Society, invited speaker for "Lessons Learned building a COVID Data Atlas", 27 Oct 2023, University of Bergen Pandemic Center, Bergen, Norway.

EFMI STC2023. EFMI Special Topics Conference on Telehealth Ecosystems in Practice, 25-27 Oct 2023, Turin Politechnic University, Turin, Italy.

AIOCC2023. 8<sup>th</sup> National congress of the Italian Association of Head&Neck Oncology, invited speaker for "AI in clinical decision making – the trade-off between predictions, explanations and causality", 29-30 Sep 2023, Rome, Italy.

AIME 2023. 21st Conference on Artificial Intelligence in Medicine, 12-15 Jun 2023, Portoroz, Slovenia. AIME 2022. 20th Conference on Artificial Intelligence in Medicine, 14-17 Jun 2022, Halifax, NS, Canada. EFMI MIE 2022, Challenges of trustable AI and added-value on health, 27-30 May 2022, Nice, France. AIME 2021. 19th Conference on Artificial Intelligence in Medicine, 15-18 June 2021, Porto, Portugal. ACM FACCT 2021 ACM Conference on Fairness, Accountability, and Transparency, March 3-10, 2021. GNB2020. Invited Speaker at Scuola nazionale del Gruppo Nazionale di Bioingegneria 2020, "AI-enabled health care: from decision support to autonomous robots", 7-10 Sept 2020, (Virtual) Bressanone, Italy AMIA2020 virtual annual symposium, 14 Nov – 18 Nov 2018, (Virtual) Washington DC, DC, USA AIME 2020. 18<sup>th</sup> Conference on Artificial Intelligence in Medicine, 25 Aug – 28 Aug 2020, (Virtual) Minneapolis, MN, USA

AIME 2019. 17th Conference on Artificial Intelligence in Medicine, 26 Jun – 29 Jun 2019, Poznan, Poland AMIA 2018 annual symposium, 3 Nov – 7 Nov 2018, San Francisco, CA, USA

32<sup>nd</sup> AAAI conference on artificial intelligence, 2-7 Feb 2018, New Orleans, USA

AIME 2017. 16th Conference on Artificial Intelligence in Medicine, 21 Jun – 24 Jun 2017, Vienna, Austria AMIA 2016 annual symposium, 12 Nov – 16 Nov 2016, Chicago, IL, USA

Medico-legal issues in decision support systems and telemedicine, 2 Dec 2015, Pavia, Italy AIME 2015 15th Conference on Artificial Intelligence in Medicine, 17 Jun – 21 Jun 2015, Pavia, Italy Value Based medicine in Oncology, 4 May 2015, INT (National Tumor Institute), Milan, Italy AMIA 2014 annual symposium, 15 Nov – 19 Nov 2014, Washington DC, USA

AAAI fall symposium HIAI track, 13 Nov-15 Nov 2014, Arlington, VA, USA

mHealth - Enhancing cancer supportive care. 4 Apr 2014, SDA Bocconi, Milan, Italy

AIME 2013. 14th Conference on Artificial Intelligence in Medicine.29 May - 1 Jun 2013, Murcia, Spain

# **SUPERVISED STUDENTS**

- 1. PhD supervisor of Bergomi L., on the topics of eXplainable AI and its impact on Medical Decision Making– Apr 2024-ongoing
- 2. PhD supervisor of Pe S., enrolled in the 39<sup>th</sup> cycle of the Italian National PhD in Artificial Intelligence, health&life sciences pillar, University Campus Bio-Medico of Rome. Nov 2023-ongoing
- 3. Research scholarship supervisor of Bergomi L., on the topics of clinical NLP, Large Language Models, and explainability of AI in medicine. Dec 2023 Mar 2024
- 4. PhD supervisor of Buonocore T., "Natural Language Interaction in Clinical Information Extraction", PhD dissertation, 2021-2024. Defended Apr 12<sup>th</sup> 2024 https://hdl.handle.net/11571/1495309

- 5. Research scholarship supervisor of Podrecca C., on auto-regressive and Bayesian models for the analysis of the impact of COVID-19 pandemic non-pharmacological control measures, University of Pavia, 2022.
- 6. Supervisor of Sajjad K., "Multi-omics Data Integration Using a BERT-Based Transformer Model", industrial internship for the XAIM master program, in partnership with EnGenome s.r.l.
- 7. Supervisor of Pe S., "Class Activation Maps for the localization of vertebral fractures in X-ray images and their evaluation in a Human-AI synergy", MEng thesis, University of Pavia, 2023
- 8. Supervisor of De Feo L., "Extension of an XAI framework based on decision trees to unstructured and multimodal data sources", MEng thesis, University of Pavia, 2023
- 9. Supervisor of Bergomi L., "Application of Large Language Models to the extraction of meaningful clinical entities from clinical radiology reports, a case study in a large research hospital federated radiology service", MEng thesis, University of Pavia, 2023
- 10. Supervisor of Ferreri L., "Requirements of biorobotics support systems for physical and cognitive rehabilitation", BEng thesis, University of Pavia, 2023
- 11. Supervisor of Oppido M., "Deep learning for biomedical applications and use cases in the BMI lab Mario Stefanelli". BEng thesis, University of Pavia, 2023
- 12.Co-supervisor for Podrecca C., "The world's response to the COVID-19 pandemic: analysis of the relationship between government policies and health monitoring indicators developed in the context of the PERISCOPE project". MEng thesis, University of Pavia, 2022.
- 13.Co-supervisor for Curtoni A., "Designing and Implementing a Cloud Analytics solution in the context of the Periscope Project". MEng thesis, University of Pavia, 2022.
- 14. Supervisor for Cova R., "Decision support in Oncology: technical feasibility and prototyping". MEng thesis, University of Pavia, 2021.
- 15.Co-supervisor for Kingwell S. MD, "Prediction of spine surgery complications risk from NSQIP data", MSc in Health Systems thesis, University of Ottawa, 2018.
- 16.Co-supervisor for Basadonne A. "IBM academic initiative: IBM Watson as a development tool for a virtual guideline assistant". MEng thesis, University of Pavia, 2017.
- 17.Co-supervisor for Salvi E. "Decision support for the elicitation of quality of life data: new functionalities for the UceWeb tool". MEng thesis, University of Pavia, 2016.
- 18.Co-supervisor for Pantano P. "Sentiment analysis for the evaluation of quality of life in atrial fibrillation patients". BEng thesis, University of Pavia, 2016.
- 19.Co-supervisor for Rizzo E. "The Mobiguide Project: integration of advanced components in the care-providers interface". MEng thesis, University of Pavia, 2014.
- 20.Co-supervisor for Spalla D. "Design of a Electronic Health Record model compliant to the HL7 vMR standard". MEng thesis, University of Pavia, 2013. Winner of the HL7 Italy best thesis award 1<sup>st</sup> edition
- 21.Co-supervisor for Gorrini R. "A web interface for quality of life data acquisition". MEng thesis, University of Pavia, 2013

# REFERENCES CONTACT INFORMATION

Prof. Wojtek Michalowski, University of Ottawa, wojtek@telfer.uottawa.ca (supervisor during my post-doc @ uOttawa, Telfer school of management interim dean, and vice-dean research)

Prof. Mor Peleg, University of Haifa, peleg.mor@gmail.com (Department chair, PI of MobiGuide, Editor-in-chief of JBI)

Prof. John H. Holmes, University of Pennsylvania, jhholmes@pennmedicine.upenn.edu (sponsor of my visiting research period at UPenn)

Prof. Silvana Quaglini, University of Pavia, silvana.quaglini@unipv.it (PhD supervisor, Lab director, PI of CAPABLE)

Prof. Riccardo Bellazzi, University of Pavia, riccardo.bellazzi@unipv.it (Department chair and PhD program chair, PI of PERISCOPE)