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Last update: October 3, 2025

Roberto Posenato

Curriculum Vitae

Education

Nov 1992–Oct 1995 **PhD in Computational Maths and Operations Research**, *University of Milano-Statale*, Italy
Original title: Dottorato di Ricerca in Matematica computazionale e Ricerca Operativa. VII edition, supported by a 3-year State Scholarship.

Feb 1991 **MSc in Computer Science (highest honours)**, *University of Milano-Statale*, Italy
Original title: Laurea in Scienze dell'Informazione.

Professional Experience

Since Oct 2019 **Associate Professor in Computer Science**, *University of Verona*, Italy

Mar 2018–Mar 2023 **Chairman of the board of directors**, *MedBrains s.r.l.*, Italy
The company is a spin-off of University of Verona

Mar 2018–Mar 2025 **Founding member**, *MedBrains s.r.l.*, Italy
The company is a spin-off of University of Verona

Nov 2000–Sep 2019 **Assistant Professor in Computer Science**, *University of Verona*, Italy

Jan 2002–Jun 2011 **Senior consultant and Researcher**, *University of Verona*, Italy
Project "WebIntegrato"

Aug 1998–Oct 2000 **Computer Labs Manager (permanent staff, VIII level)**, *University of Verona*, Italy

May 1997–May 1999 **Post-doctoral Fellowship**, *University of Verona*, Italy

Jan 1996–Dec 1996 **IT Consultant**, *University of Verona*, Italy
Faculty of Economics

Honours, Awards, Rewards and Grants

Feb 2023 **Full Professor Qualification in ING 09/H1 scientific field (Computer Science Engineering)**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
National Scientific Qualification

2020 **Grant for one post Ph.D. position**, *University of Verona*, Italy
Grant of 30K euro for the project "Extending Uncertainty in Temporal Constraint Networks (EUTCN)".

Nov 2019 **JOINT PROJECTS 2018 Grant**, *University of Verona & WINWINIT srl*, Italy
Grant of 25K euro for the project "Advanced solutions for digital marketplace".

Jul 2019 **Industry Research Grant**, *RTC spa*, Italy
Grant of 35K euro for the project "Impatto di soluzioni ad alta affidabilità per clustering di DBMS per supportare registratori di cassa virtuali".

Feb 2019 **GNCS Grant (Gruppo Nazionale per il Calcolo Scientifico)**, *Istituto Nazionale di Alta Matematica Francesco Severi*, Italy
Grant for the research project "Distributed Optimization for Large-scale Statistical Modeling".

Mar 2018 **Associate Professor Qualification in INF 01/B1 scientific field (Computer Science)**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
National Scientific Qualification

Nov 2017 **FFBAR Grant (Finanziamento delle attività base di ricerca)**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Grant for supporting research activity.

Apr 2017 **Associate Professor Qualification in ING 09/H1 scientific field (Computer Science Engineering)**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
National Scientific Qualification

May 2015 **CooperInt Grant**, *University of Verona*, Italy
Grant for the development of a research collaboration at Vassar College (USA).

Nov 2014 **Professional Reward**, *University of Verona*, Italy
For the professional achievements during 2010–2012 period.

Sep 2014 **IEEE Appreciation**, *IEEE International Conference on Healthcare Informatics 2014 (ICHI 2014)*, Italy
Local Arrangements Chair.

Jun 2014 **CooperInt Grant**, *University of Verona*, Italy
Grant for the development of a research collaboration at Vassar College (USA).

2004,'06,'09,'11–'14 **Teaching Reward**, *University of Verona*, Italy

Nov 2004–Nov 2006 **Research Reward**, *University of Verona*, Italy
For the successful application to PRIN 2004 grant, in addition to regular matching funds.

May 2005 **Möbius Multimedia Lugano International Award**, *Città di Lugano e RSI*, Lugano, Switzerland
As project architect and analyst of the best Italian University Web Site, http://www.moebiuslugano.ch.

Nov 2004–Nov 2006 **PRIN Grant**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Local Coordinator. Grant of "Programma di Ricerca scientifica di rilevante Interesse Nazionale" (PRIN) for the project "Supporto di granularità multiple e definite dall'utente nella gestione ed interrogazione di informazioni cliniche caratterizzate temporalmente", project #2004094558_003.

Nov 2003–Nov 2005 **PRIN Grant**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Researcher. Grant of "Programma di Ricerca scientifica di rilevante Interesse Nazionale" (PRIN) for the project "Rappresentazione e interrogazione via Web di informazione geografica eterogenea in formato vettoriale e raster caratterizzata da aspetti temporali", project # 2003018941_006.

Oct 1992–Oct 1993 **Research Fellowship**, *CNR*, Milan, Italy
Research Fellowship granted by the project "Progetto Finalizzato Sistemi Informatici e Calcolo Parallelo".

Research Activities

Research Interests

- *Study of New Models for Temporal Constraint Networks.*
  In 1991, Dechter et al. proposed the model of Simple Temporal Networks (STNs) for reasoning about quantitative temporal constraints. An STN is a graph (called a network) in which the nodes represent time points (to be determined), and the (weighted) edges represent linear constraints on these time points. In other words, each edge represents an upper or lower limit on the temporal distance between its endpoints. The STN model allows for efficient algorithms both for consistency verification (an STN is consistent if it admits at least one assignment of nodes that satisfies all constraints) and for network execution (finding an incremental assignment, also known as scheduling). The success of this model, even in real-world applications, has generated significant interest, leading to numerous extensions to represent additional concepts and to proposals for more efficient consistency verification and/or execution algorithms.
  Among the various extensions, those of Vidal and Fargier (1997) and Tsamardinos et al. (2003) are some of the most noteworthy. Vidal and Fargier introduced an extension of STNs to represent situations where the minimum and maximum duration of an action are known, but the exact duration cannot be determined. In such networks, called STNs with Uncertainty (STNU), the end of an action with uncertain duration is represented by a *contingent* node, whose value is not decided by the system executing the network but rather derives from the action's duration, which is decided by the environment during the network's execution. Morris and Muscettola (2001) demonstrated that, even for STNU networks, consistency (called controllability) can be verified efficiently.
  Tsamardinos et al., on the other hand, proposed the Conditional STN (CSTN) extension. In a CSTN, not all nodes need to be executed in every run but only those associated with conditions that occur during execution. Tsamardinos et al. proposed verifying CSTNs by reducing them to more general constraint networks.
  Regarding CSTNs, we proposed a refinement of the model to extend conditions to constraints and to eliminate certain ambiguities in the original model [47]. Subsequently, we demonstrated that the consistency problem is PSPACE-complete [40], simplifying Cairo and Rizzi's 2016 proof. We then proposed various semantics (and related verification algorithms) to manage delays in acquiring conditions during execution [36, 39, 46]. Additionally, we developed verification algorithms based on alternative techniques to constraint propagation [44]. Finally, we analyzed other CSTN extensions, allowing the representation of more complex constraints than linear inequalities [10, 34, 50].
  In 2012, we proposed a further extension of STNs that allows for contingent constraints and CSTN conditions: Conditional Simple Temporal Networks with Uncertainty (CSTNU)[57]. For this model, we devised various controllability verification algorithms based on constraint propagation[34, 37, 49, 54]. Later, we demonstrated that the controllability problem is PSPACE-complete [40] and that it is also possible to verify the controllability of a CSTNU by reducing it to a reachability problem in a Timed Game Automaton [11, 51].
  Further extensions on types of constraints and their related consistency and execution verification algorithms have been proposed in the following articles: [1, 21, 22, 23, 24, 25, 26, 27, 2, 28, 29, 4, 30, 6, 31, 7, 74, 8, 40, 41, 10, 11, 36, 37, 39, 40, 41, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 56, 57, 58, 75, 76, 77, 78, 79].
- Definition and analysis of a new conceptual model for workflows or business processes that enables the representation of temporal aspects, such as deadlines, minimum and maximum delays between actions, maximum and minimum durations of actions, temporal allocation of resources, and temporal authorizations [3, 7, 5, 9, 12, 35, 13, 38, 42, 43, 45, 55, 59].
- Studies on computational complexity correlation between neural networks and Ising spin glasses [17] and computational complexity of neuronal fiber–tracking problem [14].

- Studies on how the most used page rank (Google original *pagerank*) can be biased [60].
- Studies on how to model and represent data in different languages (internationalization) in data-intensive web applications [62].
- Computational complexity characterization of a graphical query language for the WWW [64].
- Computational complexity characterization of some optimization discrete problems when approximate solutions are determined by some neural network computational models [18, 19, 82].
- Implementation of neural network models as circuits [15, 63, 66, 68] and their applications to real problems [16].

Participation in Research Projects

Dec 2021–Dec 2023 **Mitigation of the effects of environmental triggers on the outcomes of chronic respiratory diseases**, *University of Verona*, Italy
Researcher, University Project

Mar 2020–Dec 2021 **INdAM 2020**, *INdAM*, Italy
Principal Investigator, "Automated Reasoning about Time in Medical and Business Applications".

2020 **PRIN 2020**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Researcher, PRIN Project "PROTECTION: PROcess modeling, managemenT, and mining for pandEmiC prevenTIon and cONtrol". *Positively Rated but not funded.*

Nov 2019–Nov 2020 **JOINT PROJECTS 2018**, *University of Verona & WINWINIT srl*, Italy
Researcher, "Advanced solutions for digital marketplace".

Jul 2019–Jul 2020 **Industry Research**, *RTC spa*, Italy
Manager, "Impatto di soluzioni ad alta affidabilità per clustering di DBMS per supportare registratori di cassa virtuali".

Feb 2019–Feb 2020 **INdAM 2019**, *INdAM*, Italy
Researcher, "Distributed Optimization for Large-scale Statistical Modeling".

Mar 2018 **PRIN 2017**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Researcher, PRIN Project "DANTE: The integrateD mAnagement of cliNical daTa and procEsses: theory, methodologies and software tools". *Positively Rated but not funded.*

Jul 2016 **PRIN 2015**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Researcher, PRIN Project "ADMIRE: dAta-Driven Management of clInical pRocEsses: theory, methodologies and software tools". *Positively Rated but not funded.*

Jan 2013 **An Integrative and Ubiquitous Healthcare Environment, Seventh Framework Programme (FP7)**, *European Commission (EC)*
Researcher. Definition and the submission of CARE-U STREP project proposal as member of the Coordinator Unit. *Positively Rated but not funded.*

Jan 2013 **Process-Aware Healthcare Information Systems for Personalized and Flexible Patient-Oriented Services (ELDERS), Seventh Framework Programme (FP7)**, *European Commission (EC)*
Researcher. Definition and the submission of ELDERS STREP project proposal as member of the Coordinator Unit. *Positively Rated but not funded.*

Jul 2013 **PRIN 2012**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Researcher, PRIN Project "Gestione integrata di dati e processi clinico-sanitari: teoria, metodologie e strumenti informatici". *Positively Rated but not funded.*

Jan 2012 **Process-based Services (PROSE), Seventh Framework Programme (FP7)**, *European Commission (EC)*
Researcher. Definition and the submission of PROSE STREP project proposal as member of the Coordinator Unit. *Positively Rated but not funded.*

Jan 2011 — **Context-Aware Business prOceSS Execution (CABOSSE), Seventh Framework Programme (FP7)**, *European Commission (EC)*
Researcher. Definition and the submission of CABOSSE STREP project proposal as member of the Coordinator Unit. *Positively Rated but not funded.*

Jul 2012 — **PRIN 2010–2011**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Researcher, PRIN Project "Metodologie e strumenti informatici per la gestione integrata di dati e processi clinico-sanitari". *Positively Rated but not funded.*

Jul 2011 — **PRIN 2009**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Researcher, PRIN Project "Modellazione, gestione e analisi intelligente di processi clinici temporali", http://www.di.univr.it/?ent=progetto&id=3700.

Sep 2008 — **PRIN 2007**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Researcher, PRIN Project "Modellazione e gestione di aspetti temporali in workflow clinici", http://www.di.univr.it/?ent=progetto&id=3434.

Jan 2005–Dec 2005 — **Accesso integrato a informazione spazio-temporale**, *University of Verona*, Italy
Researcher, University Project, http://www.di.univr.it/?ent=progetto&id=1317

Jan 2004–Dec 2004 — **Rappresentazione e interrogazione di dati spazio-temporali**, *University of Verona*, Italy
Researcher, University Project, http://www.di.univr.it/?ent=progetto&id=961

Nov 2004–Nov 2006 — **PRIN 2004**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Local Coordinator, PRIN Project "Supporto di granularità multiple e definite dall'utente nella gestione ed interrogazione di informazioni cliniche caratterizzate temporalmente", # 2004094558_003, http://www.di.univr.it/?ent=progetto&id=2430.

Nov 2003–Nov 2005 — **PRIN 2003**, *Italian Ministry of Education, Universities and Research (MIUR)*, Italy
Researcher, PRIN Project "Rappresentazione e interrogazione via Web di informazione geografica eterogenea in formato vettoriale e raster caratterizzata da aspetti temporali", # 2003018941_006, http://www.di.univr.it/?ent=progetto&id=745.

Jan 2002–Jan 2012 — **University Project "WebIntegrato"**, *University of Verona*, Italy
Senior consultant and Researcher. The scope of the project was to develop a web application framework and some web applications in order to allow the management and publication of the official information of the University of Verona in a distributed way among faculty and administrative members. The overall system won the 2005 Möbius Multimedia Award as the best Italian University Website, http://www.moebiuslugano.ch. The methodology of representation of data language translations has been published as a full paper at the 4th International Conference on Web Engineering, München, 2004 [62].

Editorial Activities

International Conferences and Workshops

2026 — Conference on Advanced Information Systems Engineering (CAiSE 2026), https://caise26.polimi.it/?page_id=71
Workshops Co-chair

2022 — International Symposium on Temporal Representation and Reasoning (TIME 2022), https://time22.time-symposium.org
Program Committee Co-chair

2014 — IEEE International Conference on Healthcare Informatics 2014 (ICHI 2014)
Local Arrangements Chair

2014 — 21st International Symposium on Temporal Representation and Reasoning (TIME 2014)
Organization Co-Chair

2012 — International Workshop on Artificial Intelligence and NetMedicine (NETMED)
Program Committee Co-chair

Member for the following Organizing/Program Committees:

Since 2024 European Conference on Artificial Intelligence (ECAI)
Program Committee member

Since 2021 AAAI Conference on Artificial Intelligence (AAAI)
Program Committee member

Since 2021 International Symposium on Temporal Representation and Reasoning (TIME)
Program Committee member

2017 Artificial Intelligence International Conference (A2IC)
Program Committee member

2017 International Symposium on Temporal Representation and Reasoning (TIME 2017)
Program Committee member

Since 2016 International Conference on Agents and Artificial Intelligence (ICAART)
Program Committee member

2009 Conference on Artificial Intelligence in Medicine (AIME)
Program Committee member

Reviewer for the following:

2011 International Conference on Artificial Intelligence in Medicine (AIME)

2009 Annual European Symposium on Algorithms (ESA)

2008 International Conference on Frontier of Computer Science and Technology

2001–2003 Symposium on Theoretical Aspects of Computer Science (STACS)

1993–1995 Workshop on Neural Networks (WIRN)

Journals

Member for the following Organizing/Program Committees:

Since 2023 Information
Associate Editor
https://www.mdpi.com/journal/information

2022–2023 Information and Computation
Guest Editor Special Issue "Temporal Representation and Reasoning"
https://www.sciencedirect.com/journal/information-and-computation/special-issue/109S9FDW5TZ

2022–2024 Information Systems
Guest Editor Special Issue "Temporal Representation and Reasoning in data-intensive systems" [2]
https://www.sciencedirect.com/journal/information-systems/special-issue/10DQKT5RJJR

Reviewer:

Since 2023 ACM Transactions on Algorithms

Since 2022 Journal of Applied Non-Classical Logics

Since 2021 IEEE Transactions on Industrial Informatics

Since 2019 Journal of Artificial Intelligence Research

Since 2018 Information Sciences

Since 2017 Mathematical Reviews

2016–2022 International Journal of Automation and Computing IJAC
http://www.ijac.net/EN/column/column114.shtml

Since 2013 Transactions on Intelligent Systems and Technology (TIST)

Since 2010 Transactions on Autonomous and Adaptive Systems (TAAS)

2007–2008 IEEE Transaction of Neural Networks (TNN)

2000 Journal of Complexity

Talks

Talks at International Events

Paper talks:

I presented the following papers at international conferences/workshops: [22, 23, 24, 26, 35, 36, 52, 56, 58, 60, 61, 62, 65, 66, 68].

Talks at National Events

Paper talks:

I presented the following papers at national conferences/workshops: [63, 67, 69, 70].

Invited Talks

Sep 2021 **Simple Temporal Networks: A Practical Foundation for Temporal Representation and Reasoning**, *28th International Symposium on Temporal Representation and Reasoning (TIME 2021)*, Alpen-Adria University, Klagenfurt, Austria

Jul 2015 **Dealing with Temporal Business Processes: from Medical Applications to Checking Dynamic Controllability**, *TEWI-Kolloquium at Information and Communication Systems Group*, Alpen-Adria University, Klagenfurt, Austria

Apr 2015 **Simple Temporal Constraint Networks with Partially Shrinkable Uncertainty**, *Seminar for Artificial Intelligence and Knowledge Engineering Group*, Murcia University, Spain

Nov 2013 **Temporal Constraint Networks and Temporal Process Management: Some Recent Research Results**, *DBIS Seminar*, Ulm University, Germany

Visits

Apr 2018 **Information and Communication Systems Group–University of Alpen-Adria**, *Klagenfurt*, Austria
Visiting Researcher

Dec 2016 **Escuela de Ingenería Informática–University of Las Palmas de Gran Canaria**, *Las Palmas de Gran Canaria*, Spain
Visiting Researcher

Jul 2015 **Information and Communication Systems Group–University of Alpen-Adria**, *Klagenfurt*, Austria
Visiting Researcher

Apr 2015 **Artificial Intelligence and Knowledge Engineering Group–University of Murcia**, *Murcia*, Spain
Visiting Researcher

Feb 2015–Mar 2015 **Institute of Databases and Information Systems–University of Ulm**, *Ulm*, Germany
Visiting Researcher

Dec 2014 **College of Engineering–Northeastern University**, *Boston, MA*, USA
Visiting Researcher

Oct 2014–Dec 2014 **Department of Computer Science–Vassar College**, *Poughkeepsie, NY*, USA
Visiting Researcher

Nov 2013 **Institute of Databases and Information Systems–Ulm University**, *Ulm*, Germany
Visiting Researcher

Sep 2012 **Department of Computer Science–Vassar College**, *Poughkeepsie, NY*, USA
Visiting Researcher

Jul 2005 **Department of Computer Science–Queen Mary, University of London**, *London*, UK
Visiting Researcher

Teaching

Summary of Graduate & Undergraduate courses taught at University of Verona

Since 2020 **Algorithms for bioinformatics**, *Laurea in BioInformatica*
Two semesters

Since 2020 **Programming Laboratory II**, *Laurea in Bioinformatica*
Two semesters

2020–2025 **Web Applications**, *Laurea Magistrale in Ingegneria e Scienze Informatiche*
One semester

2017–2019 **Ingegneria del software**, *Laurea in Informatica*
One semester.

2015–2019 **Laboratorio di basi di dati**, *Laurea in Informatica e Laurea in Bioinformatica*
Two courses. One semester.

2009–2014 **Complessità computazionale**, *Laurea magistrale in Ingegneria e Scienze informatiche*
Qualifying Course. One semester.

2009 **Algoritmi Avanzati**, *Laurea magistrale in Ingegneria e Scienze informatiche*
Qualifying Course. One semester.

2007–2008 **Laboratorio di Algoritmi e Strutture Dati**, *Laurea in Informatica*
One semester.

2006–2008 **Algoritmi Avanzati**, *Laurea specialistica in Informatica*
One semester.

2002–2005 **Complessità Computazionale**, *Laurea specialistica in Informatica*
One semester.

2001 **Laboratorio di Basi Dati e Web**, *Laurea in Informatica*
One semester.

2001 **Complessità Computazionale**, *Laurea specialistica in Informatica*
One semester.

2000–2001 **Laboratorio di Algoritmi e Strutture Dati**, *Laurea in Informatica*
One semester.

1996 **Laboratorio di Algoritmi e Strutture Dati**, *Laurea in Informatica*
One semester.

1995 **Cicuiti Logici e Digitali**, *Laurea in Informatica*
15 hours.

Summary of Master & Phd courses taught at University of Verona

2019 **Temporal Constraint Networks**, *Dottorato in Informatica*
20 hours.

2018 **Constraint Networks**, *Dottorato in Informatica*
20 hours.

2004 **Complessità Computazionale**, *Dottorato in Informatica*
One semester.

2004–2006 **Network Operating Systems**, *Master in Progettazione e gestione di sistemi di rete*
One semester.

2001 **Progettazione e realizzazione d'ipertesti per siti Web**, *Master in Tecnologie e formazione in rete*
One semester.

Summary of courses taught at other institutions

2018 **Introduction to the analysis of query planning in PostgreSQL**, *Escuela de Ingenería Informática–University of Las Palmas de Gran Canaria*, Las Palmas de Gran Canaria, Spain
Intensive course founded by Staff Mobility Teaching–Erasmus+ program.

2018 **Time in Information Systems (with applications in Medicine)**, *Faculty of Technical Sciences–University of Alpen-Adria*, Klagenfurt, Austria
Intensive course on some aspects of temporal reasoning in information systems.

2016 **Introduction to the analysis of query planning in PostgreSQL**, *Escuela de Ingenería Informática–University of Las Palmas de Gran Canaria*, Las Palmas de Gran Canaria, Spain
Intensive course founded by Staff Mobility Teaching–Erasmus+ program.

1996 **Parallel Computational Models**, *ITIS G. Marconi*, Verona, Italy
Refresher course for high-school teachers, 16 hours.

1994 **Computational Models**, *ITIS G. Marconi*, Verona, Italy
Refresher course for high school teachers, 8 hours.

1991 **Neural Networks**, *ITIS G. Marconi*, Verona, Italy
Refresher course for high school teachers, 8 hours.

Advising

At University of Verona

Since 2000 Total number of Undergraduate and Graduate student supervised: 41

2005 **Alessandro Daducci**

PostPhD Fellow

2021–2022 **Mario Alberto Ocampo Pineda**

PhD Preliminary Defense

2016–2018 **Francesca Zerbato**

2012–2014 **Alberto Sabaini**

2011–2013 **Emad Samuel Malki Ebeid**

Doctoral or PhD thesis defense committees at other universities

2017 **Andreas Lanz**, *Institute of Databases and Information Systems at Ulm University*, Ulm, Germany

Service-Third Mission

At the University of Verona

Since Oct 2025 **Rector's Delegate for the Transition to Digital Intelligence**

The main coordination duties of the Delegate concern the following activities:

1. Enhancement, development and rationalization of IT services with particular attention to the HPC (High Performance Computing) center, official websites and information system support;
2. Adoption of digital tools and artificial intelligence-based solutions in teaching, research and administrative processes;
3. Development of digital skills of students, teachers and technical-administrative staff, in line with the most recent national and European reference frameworks;
4. Awareness-raising actions and initiatives on the topics of ethics, responsibility and sustainability of digital technology;
5. Collaborations with public and private entities and research institutions to strengthen the University's role in the field of digital innovation.

Since Oct 2025 **Member of the working committee of the 'Veneto Community for Scientific Computing (CONVECS)' project**

https://www.convecs.it/

Since Sep 2023 **Departmental Coordinator for IT Services**

Since Apr 2023 **Member of the Commission for the Evaluation of Teaching Assignments in the fields of Computer Science**

Since Apr 2023 **Member of the AQ (Quality Assurance) Committee of the Master's Degree Program (Laurea Magistrale) in Artificial Intelligence (LMAI)**

Sep 2018–Dec 2019 **Scientific Supervisor**, *Project "Impresa 4.0 e Digital Transformation per le MPMI di Verona"*, University of Verona e Camera di Commercio I.A.A. di Verona, Italy

2018 **Lecturer**, *GoTo Science: "Dai Beatles ai vincoli temporali attraverso Bob Dylan"*, Verona

Lecturer at a GoTo Science meeting for spreading scientific culture to non-academic people.

2012–2016 **Academic Disciplinary Committee Member**

Elected by the Academic Senate Members.

Since Jan 2012 **Computer Science PhD Committee Member**

Nov 2009–Oct 2012 **Academic Senate Member**

Elected by the Assistant Professors of Sciences and Engineering.

Nov 2009–Oct 2012 **Academic Standing Teaching Committee Member**

Elected by the Academic Senate Members.

2008 **Examination Board Member**

for a 100 000€ computer server furniture.

Nov 2006–Oct 2009 **Academic Senate Member**

Elected by the Assistant Professors of Sciences and Engineering.

Nov 2006–Oct 2009 **Academic Standing Budget Committee Member**

Elected by the Academic Senate Members.

2006 **Hiring Committee Member**

for one IT Officer (D1 permanent staff category) position.

Nov 2004–Oct 2012 **Spin-Off Committee Member**, *Department of Computer Science*

Nov 2004–Oct 2010 **Assistant Professors' Spokesman**, *Faculty of Mathematical, Physical and Natural Science*

Elected by the Assistant Professors of Sciences and Engineering.

Jan 2004–Dec 2007 **Scientific Committee Member**, *Master in "Progettazione e gestione di sistemi di rete"*

Jan 2002–Jun 2011 **Senior consultant and Researcher**, *Project "WebIntegrato"*, University of Verona , Italy

2002 **Hiring Committee Member**
for one IT technician (C1 permanent staff category) position.

2001 **Hiring Committee Member**
for one IT Officer (D1 permanent staff category) position.

2000–2001 **Chair of an Examination Board**
for a new 200 000€ Computer Science Department Labs furniture.

1998–2000 **Chair of an University Committee**
for the development of the new university intranet network (200 000€ project budget).

Public Engagement

2023 **Speaker for the Computer Science Department**
University orientation meeting with around 300 fifth-year students from ITIS G. Marconi (Verona).

2023 **Speaker for the Computer Science Department**
University orientation meeting with around 30 fifth-year students from IISS COPERNICO-PASOLI (Verona).

2009 **Hiring Committee Member (elected)**, *Free University of Bolzano*
for one Assistant Professor position in Computer Science.

2006 **Hiring Committee Member (elected)**, *University of Milano-Statale*
for one Assistant Professor position in Computer Science.

2001 **Hiring Committee Member (elected)**, *University of Milano-Statale*
for one Assistant Professor position in Computer Science.

Oct 1991–Sep 1992 **Required Military Service**, Pesaro, Italy

Publications

Refereed Journals

[1] L. Hunsberger and R. Posenato, "Recent Algorithmic Advances in Simple Temporal Networks with Uncertainty: from Faster Controllability Checking to Faster Execution," *Information and Computation*, vol. 307, article no. 105356, Nov. 2025. doi:10.1016/j.ic.2025.105356.

[2] A. Artikis, R. Posenato, and S. Tonetta, "Temporal representation and reasoning in data-intensive systems," *Information Systems*, vol. 122, article no. 102350, May 2024. doi:10.1016/j.is.2024.102350.

[3] R. Posenato and C. Combi, "Flexible temporal constraint management in modularized processes," *Information Systems*, vol. 118, article no. 102257, 2023. doi:10.1016/j.is.2023.102257.

[4] L. Hunsberger and R. Posenato, "A Faster Algorithm for Converting Simple Temporal Networks with Uncertainty into Dispatchable Form," *Information and Computation*, vol. 293, no. 105063, pp. 1–21, 2023. doi:10.1016/j.ic.2023.105063.

[5] M. Ocampo-Pineda, R. Posenato, and F. Zerbato, "TimeAwareBPMN-js: An editor and temporal verification tool for Time-Aware BPMN processes," *SoftwareX*, vol. 17, article no. 100939, Jan. 2022. doi:10.1016/j.softx.2021.100939.

[6] R. Posenato, "CSTNU Tool: A Java library for checking temporal networks," *SoftwareX*, vol. 17, article no. 100905, 2022. doi:10.1016/j.softx.2021.100905.

[7] R. Posenato and C. Combi, "Adding flexibility to uncertainty: Flexible Simple Temporal Networks with Uncertainty (FTNU)," *Information Sciences*, vol. 584, pp. 784–807, Jan. 2022. doi:10.1016/j.ins.2021.10.008.

[8] C. Combi, R. Posenato, L. Viganò, and M. Zavatteri, "Conditional Simple Temporal Networks with Uncertainty and Resources," *J Artif Intell Res*, vol. 64, pp. 931–985, Apr. 2019. doi:10.1613/jair.1.11453.

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Software

Since 2022 **TimeAwareBPMN-js Tool**, *https://gitlab.com/univr.di/TimeAwareBPMN*
Web application for editing and analyzing temporal-aware BPMN models.
The article [5] describes it in detail.

Since 2012 **CSTNU Tool**, *http://profs.scienze.univr.it/~posenato/software/cstnu*
Software suite for (i) graphically building/visualizing CSTN(U)s, (ii) checking CSTN(U)s consistency/controllability using different algorithms, and (iii) running different benchmarks.
The article [6] describes CSTNU Tool in detail.

2015 **HyTN Tool**, *http://profs.scienze.univr.it/~posenato/software/hytn*
Software suite for (i) checking HyTN(s) using different algorithms, and (ii) running different benchmarks. Checking algorithms have been described in [10] .

Verona, October 3, 2025 Roberto Posenato