

# GIOVANNI MERONI

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H-Index: [11](#) (Scopus), [12](#) (Google Scholar)

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21100 Varese (VA), Italy

I am currently working as **Assistant Professor** at **DISTA, University of Insubria** since April 2026. From April 2022 to December 2024, I worked as Assistant Professor, and from January 2025 to March 2026 as Associate Professor, at DTU Compute, Technical University of Denmark. From July 2018 to March 2022, I worked as Postdoctoral Research Assistant at Dipartimento di Elettronica, Informazione e Bioingegneria, Politecnico di Milano, where I also received the PhD degree in Information Engineering. I belong to the Software Systems Engineering research section, and my research interests concern Business Process Management, Information Systems Engineering, Blockchain, Internet of Things, and Service Oriented Architectures.

## EDUCATION

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|--------------|--|---------------------|
| <b>PhD</b>   | Politecnico di Milano, Information Engineering<br>Dissertation: “Artifact-driven Business Process Monitoring”<br>Advisor: Prof. Pierluigi Plebani<br>Graduated Cum Laude | Nov 2014 – Jun 2018 |
| <b>MSc</b>   | Politecnico di Milano, Computer Engineering<br>Thesis: “SCoReS: SeNSori COmposition & REtrieval Services”<br>Supervisor: Prof. Letizia Tanca                             | Oct 2011 – Oct 2013 |
| <b>BSc</b>   | Politecnico di Milano, Computer Engineering  | Oct 2008 – Sep 2011 |
| <b>Dipl.</b> | Liceo Scientifico G. Ferraris, Varese  | Sep 2003 – Jul 2008 |

## PREVIOUS EMPLOYMENT

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| <b>Technical University of Denmark</b><br>Associate Professor<br>Assistant Professor | Jan 2025 – Mar 2026<br>Apr 2022 – Dec 2024 |
| <b>Politecnico di Milano</b><br>Postdoctoral Research Assistant                      | Jun 2018 – Mar 2022                        |
| <b>Reti S.p.A.</b><br>IT consultant  | Oct 2013 – Sep 2014                        |

## AWARDS

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- ICSOC 2022 Distinguished Paper Award
- BPM 2021 Blockchain Forum Best Paper Award
- CAiSE 2019 PhD Award

## RESEARCH INTERESTS

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### **IoT-based Multi-party Process Monitoring**

Business Processes are exploiting Smart Objects more and more to perform their tasks. This research envisions the adoption of Smart Objects to design reliable business processes and to assess their correct execution. Instead of using control-flow based languages to express the processes, declarative-based approaches like GSM (Guard Stage Milestone) and CMMN (Case Management Modeling Notation) are used.

#### *Most relevant publications:*

Meroni, G., Garda, S.: Artifact-Driven Process Monitoring at Scale, In: Service-Oriented Computing - ICSOC 2023. LNCS, pp. 3–12. Springer International Publishing (2023)

Meroni, G.: Artifact-Driven Business Process Monitoring - A Novel Approach to Transparently Monitor Business Processes, Supported by Methods, Tools, and Real-World Applications. LNBIP Volume 368. Springer International Publishing (2019)

Meroni, G., Baresi, L., Montali, M., Plebani, P.: Multi-party business process compliance monitoring through IoT-enabled artifacts. In: Information Systems. Volume 73, pp. 61 – 78. Elsevier (2018)

### **Blockchain and Business Process Management**

Blockchain and distributed ledger platforms are recently gaining a lot of attention, as they make it possible to build trust among organizations without relying on trusted intermediaries, such as banks or government agencies. At the same time, business process management aims at discovering, analyzing, designing, executing, and monitoring business processes. This research work analyzes these two areas of interest.

#### *Most relevant publications:*

Köpke, J., Meroni, G., Salnitri, M.: Designing secure business processes for blockchains with SecBPMN2BC. In: Future Generation Computer Systems. Volume 141, pp 382 – 398. Elsevier (2023)

Di Ciccio, C., Meroni, G., Plebani, P.: On the adoption of blockchain for business process monitoring. In: Software and Systems Modeling. Volume 21, pp 915 – 937. Springer (2022)

Comuzzi, M., Cappiello, C., Meroni, G.: On the Need for Data Quality Assessment in Blockchains. In: IEEE Internet Computing. Volume 25, pp 71 – 78. IEEE (2021)

## GRANTS AND FUNDING

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### **Copenhagen Fintech**

Copenhagen Fintech Research Project Grant 2024 – 200.000 DKK

<https://www.copenhagenfintech.dk/funding>

### **EuroTech**

EuroTech Visiting Researcher Grant 2024 – 1.000 Euro

<https://eurotech-universities.eu/funding/eurotech-visiting-researcher-programme/>

### **Otto Mønsted Foundation**

Otto Mønsted Conference Participation Grant 2022 – 5.500 DKK

<https://omfonden.dk/application-2/>

## PARTICIPATION IN FUNDED PROJECTS

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### **Copenhagen Fintech**

Jan 2024 – Dec 2024

Improving Business Processes with Blockchain: Model-driven Generation of Secure Smart Contract Code

#### **Principal Investigator**

<https://www.copenhagenfintech.dk/projects/improving-business-processes-with-blockchain>

### **MEF HBD**

May 2021 – Mar 2022

Health Big Data: creation of a distributed platform to store, share and analyze clinical and scientific data, ensuring connectivity between scientific institutes for research, hospitalization, and healthcare (IRCCS), the National Health System, and other Italian and foreign research institutes.

<https://www.alleanzacontroilcancro.it/en/progetti/health-big-data/>

### **EU-H2020 DITAS**

Nov 2017 – May 2021

Data-intensive applications Improvement by moving daTA and computation in mixed cloud/fog environments: creation of a framework supporting the design and deployment of data-intensive applications, able to deploy such application in an optimal way by performing data and computation movement operations transparently and autonomously.

<https://www.ditas-project.eu/>

### **CTN-ITS ITS2020**

Nov 2014 – Nov 2017

Intelligent Transportation Systems: creation of innovative solutions to integrate and support freight transportation processes.

<https://www.itsitaly2020.it/>

## **CONFERENCE ORGANIZATION**

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CAISE (Int. Conf. on Advanced Information Systems Engineering) 2026 Publication Chair  
ICPM (Int. Conf. on Process Mining) 2024 Demo Chair  
ICPM (Int. Conf. on Process Mining) 2024 Infrastructure Chair  
JCC (Int. Conf. on JointCloud Computing) 2021 Publicity Chair  
RCIS (Research Challenges in Information Systems) 2021 Posters & Demos Chair  
BPM (Int. Conf. on Business Process Management) 2020 Blockchain Forum Chair

## **EDITORIAL BOARD MEMBERSHIP**

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Guest Editor of the Special Issue “Blockchain for Trusted Information Systems” in  
Frontiers in Blockchain (ISSN 2624-7852)

Guest Editor of the Special Issue “Novel Applications of Blockchain for Information  
Systems and Business Process Management” in Blockchain Research and Applications  
(ISSN 2666-9536)

## **PROGRAM COMMITTEE MEMBERSHIP**

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CAiSE (Int. Conf. on Advanced Information Systems Engineering) 2026  
CAiSE (Int. Conf. on Advanced Information Systems Engineering) Doctoral Consortium  
2025-2026  
BPM (Int. Conf. on Business Process Management) 2024-2026  
BPM (Int. Conf. on Business Process Management) Demo & Resources Track 2020-2026  
BPM (Int. Conf. on Business Process Management) Blockchain Forum 2019-2024  
ICPM (Int. Conf. on Process Mining) 2024-2025  
ICPM (Int. Conf. on Process Mining) Demo Track 2023-2025  
CoopIS (Int. Conf. on Cooperative Information Systems) 2024-2026  
RCIS (Int. Conf. on Research Challenges in Information Science) 2020-2026  
RCIS (Int. Conf. on Research Challenges in Information Science) Forum 2024-2026  
BPMDS (Int. Conf. on Business Process Modeling, Development and Support 2025-2026  
BlockTEA (Int. Conf. on Blockchain Technology and Emerging Applications) 2025-2026  
BCCA (Int. Conf. on Blockchain Computing and Applications) 2021-2023  
CoMinDS (Workshop on Collaborative Mining for Distributed Systems) 2022-2025  
BC4IS (Workshop on Blockchain for Information Systems) 2021-2024  
BIOC (Workshop on Blockchains for Inter-Organizational Collaboration) 2021-2022  
B4TDS (Workshop on Blockchain for Trusted Data Sharing) 2022  
NeGIS (Workshop on Next Generation Information Systems: Modeling, Monitoring, and  
Management in Cloud and Fog Computing) 2020-2021  
SPBP (Workshop on Security and Privacy-enhanced Business Process Management) 2021  
MOD-DLT (Workshop on Conceptual Modeling for Distributed Ledger Technologies)  
2020  
DaMove (Workshop on Efficient Data Movement in Fog Computing) 2019

## TUTORIALS AND PANELS

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**What is blockchain and how can it help my business?** Tutorial held with Profs. Marco Comuzzi and Paul Grefen at ICSSOC (International Conference on Service Oriented Computing) 2023. November 30, 2023, Rome, Italy

**Artifact-driven Process Monitoring: a viable solution to continuously and autonomously monitor business processes.** Tutorial held at BPM (International Conference on Business Process Management) 2021. September 8, 2021, Rome, Italy.

## PARTICIPATION IN SEMINARS

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**Schloss Dagstuhl** – Multi-Faceted Visual Process Mining and Analytics Apr 2025

**Schloss Dagstuhl** – Human in the (Process) Mines Jul 2023

**CivTech Global Alliance** - Circularity and Smart Choice Sep 2022

## INTERNATIONAL COLLABORATIONS

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**Eindhoven University of Technology – The Netherlands** Apr 2024  
Visiting researcher

**Ulsan National Institute of Science Technology – South Korea** Apr 2019 – May 2019  
Visiting researcher

**Vienna University of Economics and Business – Austria** Sep 2016 – Dec 2016  
Visiting PhD student

## INVITED TALKS AND GUEST LECTURES

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**Eindhoven University of Technology** Apr 2024  
Seminar “Artifact-Driven Process Monitoring for Online Conformance Checking”

**MOD-DLT 2020 Workshop** Feb 2020  
Invited talk “Trusted Artifact-Driven Monitoring of Business Processes using Blockchains”

**Ulsan National Institute of Science and Technology** Apr 2019  
Seminar “Business Process Monitoring with Blockchain: Challenges, Opportunities and Solutions”

## PEER-REVIEW ACTIVITY

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- ACM Journal of Data and Information Quality (ISSN 1936-1963)
- ACM Transactions on Autonomous and Adaptive Systems (ISSN 1556-4665)
- ACM Transactions on Software Engineering and Methodology (ISSN 1557-7392)
- Elsevier Advanced Engineering Informatics (ISSN 1474-0346)
- Elsevier Artificial Intelligence in Medicine (ISSN 0933-3657)
- Elsevier Blockchain Research and Applications (ISSN 2666-9536)
- Elsevier Computers in Industry (ISSN 0166-3615)
- Elsevier Data & Knowledge Engineering (ISSN 0169-023X)
- Elsevier Future Generation Computer Systems (ISSN 0167-739X)
- Elsevier Journal of High Technology Management Research (ISSN 1047-8310)
- Elsevier SoftwareX (ISSN 2352-7110)
- EMISA International Journal of Conceptual Modeling (ISSN 1866-3621)
- Frontiers in Blockchain (ISSN 2624-7852)
- IEEE Software (ISSN 0740-7459)
- IEEE Transactions on Automation Science and Engineering (ISSN 1545-5955)
- IEEE Transactions on Services Computing (ISSN 1939-1374)
- Springer Business and Information Systems Engineering (ISSN 1867-0202)
- Springer Journal on Data Semantics (ISSN 1861-2040)
- Springer Requirements Engineering (ISSN 1432-010X)
- Springer Software and Systems Modeling (ISSN 1619-1374)
- WSP International Journal of Cooperative Information Systems (ISSN 0218-8430)

## QUALIFICATIONS

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**Ministero Università e Ricerca - Abilitazione Scientifica Nazionale** Mar 2025  
II fascia – Settore Concorsuale 09/H1 (Sistemi di Elaborazione delle Informazioni)

## TEACHING EXPERIENCE

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**University of Insubria** Apr 2026 – Today

**Lecturer**, Department of Theoretical and Applied Sciences

- Interdisciplinary Laboratory A (A.Y. 2025-26)
- Interdisciplinary Laboratory B (A.Y. 2025-26)

**Teaching Assistant**, Department of Theoretical and Applied Sciences

- Concurrent and Distributed Programming (A.Y. 2025-26)

**Sapienza University of Rome** Sep 2024 – Nov 2024

**Lecturer**

- PhD course on Blockchain for Trusted Information Systems (15 hours)

**Technical University of Denmark**

Aug 2022 – Mar 2026

**Lecturer, DTU Compute**

- Programming in C++ (A.Y. 2022-23, 2023-24, 2024-25)
- Introductory Databases and Database Programming (A.Y. 2022-23, 2023-24, 2024-25, 2025-26)
- Systems Integration (A.Y. 2023-24, 2024-25, 2025-26)
- Master of Cyber Security – Masterclass on Process Mining and Programming Smart Contracts & Blockchain (A.Y. 2022-23, 2023-24)

**Politecnico di Milano**

Mar 2015 – Mar 2022

**Lecturer, Dipartimento di Elettronica, Informazione e Bioingegneria**

- Software Engineering – Final Exam (A.Y. 2020-21)
- Information Systems for Computer Engineers (A.Y. 2019-20)

**Teaching Assistant, Dipartimento di Elettronica, Informazione e Bioingegneria**

- Databases 1 (A.Y. 2018-19, 2019-20, 2020-21, 2021-22)
- Digital Technologies 1 (A.Y. 2019-20, 2020-21)
- Information Systems for Management Engineers (A.Y. 2015-16, 2016-17, 2017-18, 2018-19, 2019-20)
- Information Systems for Computer Engineers (A.Y. 2014-15, 2015-16, 2016-17, 2017-18, 2018-19, 2019-20)
- Software Engineering – Final Exam (A.Y. 2017-18, 2018-19)
- Process and Service Design (A.Y. 2018-19)

**Digit-Ally**

Nov 2020 – Feb 2022

**Lecturer**

- Introduction to Business Intelligence: interpreting charts and dashboards
- Evolution of the Internet and the World Wide Web

**Cefriel**

Jan 2020

**Lecturer**

- IT Solution Architect course – Enterprise Architecture 4.0-Enterprise Modeling

## PUBLICATIONS

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### *Books*

Comuzzi, M., Grefen, P., Meroni, G.: *Blockchain for Business: IT Principles into Practice*. Routledge (2023)

Meroni, G.: *Artifact-Driven Business Process Monitoring - A Novel Approach to Transparently Monitor Business Processes, Supported by Methods, Tools, and Real-World Applications*. LNBIP Volume 368. Springer International Publishing (2019)

### *Book Chapters*

Burattin, A., Meroni, G., Di Federico, G., Lopez-Acosta, H. A., Rivkin, A., Kindler, E.: *Human-Centric Processes: Where IoT and People Meet*, In: Fortino, G., Mecella, M.: *Internet of Things Meets Business Process Management*. Springer International Publishing (2026)

### *International Journal Articles*

Köpke, J., Meroni, G., Salnitri, M.: *Designing secure business processes for blockchains with SecBPMN2BC*. In: *Future Generation Computer Systems*. Volume 141, pp 382 – 398. Elsevier (2023)

Di Ciccio, C., Meroni, G., Plebani, P.: *On the adoption of blockchain for business process monitoring*. In: *Software and Systems Modeling*. Volume 21, pp 915 – 937. Springer International Publishing (2022)

Comuzzi, M., Cappiello, C., Daniel, F., Meroni, G.: *Toward Quality-Aware Transaction Validation in Blockchain*. In: *IEEE Software*. IEEE (2022)

Comuzzi, M., Cappiello, C., Meroni, G.: *On the Need for Data Quality Assessment in Blockchains*. In: *IEEE Internet Computing*. Volume 25, pp 71 – 78. IEEE (2021)

Cappiello, C., Meroni, G., Pernici, B., Plebani, P., Salnitri, M., Vitali, M., Trojaniello, D., Catallo, I., Sanna, A.: *Improving Health Monitoring With Adaptive Data Movement in Fog Computing*. In: *Frontiers Robotics AI*. Volume 7: 96. Frontiers (2020)

Meroni, G., Baresi, L., Montali, M., Plebani, P.: *Multi-party business process compliance monitoring through IoT-enabled artifacts*. In: *Information Systems*. Volume 73, pp. 61 – 78. Elsevier (2018)

### *International Conference Papers*

Köpke, J., Meroni, G., Salnitri, M.: Towards Automated Handling of Object State Exceptions in Smart Contracts, In: BPM Forum 2025. LNBIP, pp. 168-183. Springer International Publishing (2025)

Meroni, G., Plebani, P., Tagliente, S., Montali, M.: Modeling and Monitoring Business Constraints of Non-conformant Choreographed Business Processes, In: CAiSE 2025 (2). LNCS, pp. 243-258. Springer International Publishing (2025)

Meroni, G., Eshuis, R.: Goal-oriented Process Monitoring: An Artifact-driven Monitoring Extension, In: CAiSE Forum 2025. LNBIP, pp. 119-127. Springer International Publishing (2025)

Meroni, G., Dalskov, A. P. K., Norta, A.: SecBPMN2BC Online Editor: A Web-Based Tool for Designing Secure Business Processes on Blockchains, In: CAiSE Forum 2025. LNBIP, pp 197-204. Springer International Publishing (2025)

Meroni, G., Garda, S.: Artifact-Driven Process Monitoring at Scale, In: Service-Oriented Computing - ICSOC 2023. LNCS, pp. 3–12. Springer International Publishing (2023)

Yessenbayev, O., Comuzzi, M., Meroni, G., Nguyen, D. C. D.: A Middleware for Hybrid Blockchain Applications: Towards Fast, Affordable, and Accountable Integration, In: Service-Oriented Computing - ICSOC 2023. LNCS, pp. 307–322. Springer International Publishing (2023)

Bertolini, M., Meroni, G., Plebani, P.: Trusted Compliance Checking on Blockchain with Commitments: A Model-Driven Approach. In: BPM Forum 2023. LNBIP, pp 3-19. Springer International Publishing (2023)

Di Gennaro, M., Italiano, L., Meroni, G., Quattrocchi, G.: DeepThought: A Reputation and Voting-Based Blockchain Oracle. In: Service-Oriented Computing - ICSOC 2022. LNCS, pp. 369 – 383. Springer International Publishing (2022)

Meroni, G.: Artifact-driven Process Monitoring: a viable solution to continuously and autonomously monitor business processes. In: Business Process Management – BPM 2021. LNCS, pp. 37 – 43. Springer International Publishing (2021)

Comuzzi, M., Cappiello, C., Meroni, G.: An empirical evaluation of smart contract-based data quality assessment in Ethereum. In: BPM Blockchain and RPA Forum 2021. LNBIP, pp. 51 – 66. Springer International Publishing (2021)

Di Ciccio, C., Meroni, G., Plebani, P.: Business Process Monitoring on Blockchains: Potentials and Challenges. In: Enterprise, Business-Process and Information Systems Modeling 2020. LNBIP, pp. 36 – 51. Springer International Publishing (2020)

Meroni, G., Mizmizi, M., Plebani, P., Reggiani, L.: Improving mobile business process monitoring with enhanced NFV MANO: a method to elicit connectivity requirements from process models. In: SAC 2020. pp. 69 – 76. ACM (2020)

Meroni, G., Mizmizi, M., Plebani, P., Reggiani, L.: Adaptive Mobile Business Process Monitoring Service with Enhanced NFV MANO. In: Service-Oriented Computing - ICSOC 2019. LNCS, pp. 573 – 574. Springer International Publishing (2019)

Meroni, G., Plebani, P., Vona, F.: Trusted Artifact-Driven Process Monitoring of Multi-party Business Processes with Blockchain. In: BPM Blockchain and CEE Forum 2019. LNBIP, pp. 55 – 70. Springer International Publishing (2019)

Cappiello, C., Comuzzi, M., Daniel, F., Meroni, G.: Data Quality Control in Blockchain Applications. In: BPM Blockchain and CEE Forum 2019. LNBIP, pp. 55 – 70. Springer International Publishing (2019)

Meroni, G., Di Ciccio, C., Mendling, J.: An Artifact-Driven Approach to Monitor Business Processes Through Real-World Objects. In: Service-Oriented Computing - ICSOC 2017. LNCS, pp. 297 – 313. Springer International Publishing (2017)

Meroni, G., Plebani, P.: Artifact-Driven Monitoring for Human-Centric Business Processes with Smart Devices: Assessment and Improvement. In: BPM Forum 2017. LNBIP, pp. 160 – 176. Springer International Publishing (2017)

Meroni, G., Di Ciccio, C., Mendling, J.: Artifact-driven process monitoring: Dynamically binding real-world objects to running processes. In: CAiSE-Forum-DC 2017. CEUR Workshop Proceedings, pp. 105 – 112. CEUR-WS.org (2017)

Baresi, L., Meroni, G., Plebani, P.: On Handling Business Process Anomalies through Artifact-based Modeling. In: CAiSE-Forum 2016. CEUR Workshop Proceedings, pp. 9 – 16. CEUR-WS.org (2016)

Baresi, L., Meroni, G., Plebani, P.: Using the Guard-Stage-Milestone Notation for Monitoring BPMN-based Processes. In: Enterprise, Business-Process and Information Systems Modeling 2016. LNBIP, pp. 18 – 33. Springer International Publishing (2016)

Meroni, G.: Integrating the Internet of Things with Business Process Management: A Process-aware Framework for Smart Objects. In: CAiSE 2015 Doctoral Consortium. CEUR Workshop Proceedings, pp. 56 – 64. CEUR-WS.org (2015)

### ***Workshop Papers***

Comuzzi, M., Meroni, G., Grefen, P.: What is Blockchain and How Can it Help My Business? (Extended Tutorial Summary). In: ICSOC 2023 Workshops. LNCS, pp. 327 – 334. Springer International Publishing (2023)

Meroni, G., Garda, S.: Mapping Artifact-Driven Monitoring Results Back to BPMN Process Diagrams. In: ICPM 2023 Workshops. LNBIP, pp 475-486. Springer International Publishing (2023)

Di Federico, G., Meroni, G., Burattin, A.: Viola: Detecting Violations of Behaviors from Streams of Sensor Data. In: BPM 2023 Workshops. LNBIP, pp. 118 – 130. Springer International Publishing (2023)

Meroni, G.: Trusted Artifact-Driven Monitoring of Business Processes using Blockchains (invited paper). In: Companion Proceedings of Modellierung 2020. CEUR Workshop Proceedings, pp. 45 – 47. CEUR-WS.org (2020)

Meroni, G., Plebani, P.: Combining Artifact-Driven Monitoring with Blockchain: Analysis and Solutions. In: CAiSE 2018 Workshops. LNBIP, pp. 103 – 114. Springer International Publishing (2018)

Baresi, L., Meroni, G., Plebani, P.: A GSM-based approach for Monitoring Cross-Organization Business Processes using Smart Objects. In: BPM 2015 Workshops. LNBIP, pp. 389 – 400. Springer International Publishing (2016)

Foglieni, C., Mazuran, M., Meroni, G., Plebani, P.: Retrieving Sensors Data in Smart Buildings Through Services: A Similarity Algorithm. In: Service-Oriented Computing - ICSOC 2014 Workshops. LNCS, pp. 281 – 291. Springer International Publishing (2015)

## LANGUAGES

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**Italian:** Native Language

**English:** Advanced Listener, Speaker, Reading and Writing

**German:** Intermediate Speaker, Listener, Reading and Writing

**Danish:** Intermediate Reading and Writing. Novice Listener and Speaker

## COMPUTER SKILLS

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**Programming languages:** Excellent knowledge of Java, C++, SQL. Proficient in C, C#, Visual Basic, Node.JS, Eclipse ATL, GNU Bash, Solidity

**Applications:** Proficient in Microsoft Office, Visio and Project, IBM Rational Rose. Fair knowledge of LaTeX

**Databases:** Proficient in Microsoft Access and SQL Server, IBM DB2 UDB, Oracle MySQL.

**Platforms:** Excellent knowledge of Microsoft Windows (all versions). Proficient in GNU/Linux and in other UNIX operating systems (Oracle Solaris, HP HP-UX and Tru64, SGI IRIX, IBM AIX). Basic knowledge of IBM i (OS/400) and z/OS (MVS), and HP/VSI OpenVMS