



## PERSONAL INFORMATION

Name	<b>CARLA PIAZZA</b>
Address	<b>UNIVERSITÀ DEGLI STUDI DI UDINE VIA LE SCIENZE 206, UDINE - 33100</b>
Telephone	<b>0432 558497</b>
Web page	<a href="http://users.dimi.uniud.it/~carla.piazza/">http://users.dimi.uniud.it/~carla.piazza/</a>
E-mail	<a href="mailto:carla.piazza@uniud.it">carla.piazza@uniud.it</a>
Nationality	Italian
Date of Birth	09/04/1974
Gender	female

## WORK EXPERIENCE

- Dates (from - to) December 2021 - today
- Name and address of the employer Università degli Studi di Udine – Department of Mathematics, Informatics, and Physics
  - Type of business or sector
  - Occupation or position held **Full professor – INFORMATICS (INF/01)**
- Main activities and responsibilities
  
- Dates (from - to) November 2005 – November 2021
- Name and address of the employer Università degli Studi di Udine - Department of Mathematics, Informatics, and Physics
  - Type of business or sector
  - Occupation or position held **Associate professor – INFORMATICS (INF/01)**
- Main activities and responsibilities
  
- Dates (from - to) January 2005 – October 2005
- Name and address of the employer Università degli Studi di Udine - Department of Mathematics, Informatics, and Physics
  - Type of business or sector
  - Occupation or position held **Researcher – INFORMATICS (INF/01)**
- Main activities and responsibilities

## EDUCATION AND TRAINING

- Dates (from - to) 2002-2004
- Name and type of organisation providing education and training  
Università degli Studi di Udine  
Università Ca' Foscari di Venezia  
New York University

- Principal subjects/occupational skills covered
- Title of qualification awarded

### Post Doc Grants

- Dates (from - to) 1998 – 2002
- Name and type of organisation providing education and training  
Università degli Studi di Udine
- Principal subjects/occupational skills covered  
Computing in Non-Standard Set Theories
- Title of qualification awarded

### Doctorate in Computer Science

- Dates (from - to) 1992 – 1997
- Name and type of organisation providing education and training  
Università degli Studi di Parma
- Principal subjects/occupational skills covered  
Research Thesis on Set-Constraint Languages
- Title of qualification awarded

### Master in Mathematics (cum laude)

## PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE  
OTHER LANGUAGES

ITALIAN  
ENGLISH, FRENCH

### SCIENTIFIC SKILLS AND COMPETENCES

*Living and working with other people, in multicultural environments, in positions where communication is important and situations where teamwork is essential (for example culture and sports), etc.*

- Research interests (5 Key words): Systems Biology, Hybrid Systems, Formal Verification, Information Flow Security, Quantum Computing.
- Author of 102 publication on Scientific Journals and Conferences indexed on Scopus.
- Lecturer of more than 40 academic courses or modules since 2005 (i.e., Algorithms and Data Structures, Computational Complexity, Quantum computing).
- Organization and Communication at national and international congresses (more than 20 communications).
- Supervisor of more than 20 university theses (three-year, specialist and master's); guiding teacher and co-rapporteur of 4 doctoral theses.

### RELEVANT ROLES AND COMPETENCES

*Coordination and administration of people, projects and budgets; at work, in voluntary work (for example culture and sports) and at home, etc.*

- Coordinator of the Bachelor and Master degrees in Computer Science Area at the University of Udine (November 2022-today).
- Coordinator of the research group on Computational Biology and Bioinformatics at the University of Udine.
- Coordinator of 3 research projects as principal investigator or local principal investigator.
  - o 2022-2025: Noninterference and Reversibility Analysis in Private Blockchains (NiRvAna). Funding body: MIUR –PRIN. Role: Local principal investigator;
  - o 2017-2020 Efforts in the uNderstanding of Complex InterActing SystEms (ENCASE). Funding body: Università degli Studi di Udine. Role: principal investigator;
  - o 2015 Algoritmica per il model checking e la sintesi di sistemi safety-critical. Ente Finanziatore: INdAM Istituto Nazionale di Alta Matematica.

### PUBLICATION INDEXES (SCOPUS)

- NUMBER OF PUBLICATIONS: 110
- TOTAL NUMBER OF CITATIONS: 1137
- H-INDEX: 19

1. Ressi D, Romanello R, Piazza C, Rossi S. (2024). AI-enhanced blockchain technology: A review of advancements and opportunities. *Journal of Network and Computer Applications*, 225, 103858.
2. Piazza C, Rossi S, Smuseva D. (2024). Efficient Algorithm for Proportional Lumpability and Its Application to Selfish Mining in Public Blockchains. *Algorithms*, 17(4), 159.
3. Rossi N, Gigante N, Vitacolonna N, Piazza C. (2024). Inferring Markov Chains to Describe Convergent Tumor Evolution with CIMICE. *IEEE/ACM Transactions on Computational Biology and Bioinformatics*, 21(1), 106-119.
4. Della Giustina D, Londero C, Piazza C, Riccardi B, Romanello R. (2024). Quantum encoding of dynamic directed graphs. *Journal of Logical and Algebraic Methods in Programming*, 136, 100925.
5. Colautti A, Rossi N, Piazza C, Comi G, Iacumin L. (2023). Draft genome sequences of 14 *Lactocaseibacillus* spp. strains, representatives of a collection of 200 strains. *Microbiology Resource Announcements* 12(10).
6. Coan M, Toso M, Cesaratto L, Rigo I, Borgna S, Dalla Pietà A, Zandonà L, Iuri L, Zucchetto A, Piazza C, Baldassarre G, Spizzo R. (2023). LINC01605 Is a Novel Target of Mutant p53 in Breast and Ovarian Cancer Cell Lines. *Int. Journal of Molecular Sciences*, 24(18), 13736.
7. Piazza C, Romanello R. (2023). Synthesis of CNOT minimal quantum circuits with topological constraints through ASP. *Proceedings of AIQxQAI2023*, CEUR 3586.
8. Casagrande A, Piazza C. (2023). Adaptive Directions for Bernstein-Based Polynomial Set Evolution. *Proceedings of RP2023*, LNCS 14235, 113-126.
9. Casagrande A, Cimatti A, Dorigo L, Piazza C, Tonetta S. (2023). Set-Based Invariants over Polynomial Systems. *Proceedings of CILC2023*, CEUR 3428.
10. Piazza C, Romanello R, Wille R. (2023). An ASP Approach for the Synthesis of CNOT Minimal Quantum Circuits. *Proceedings of CILC2023*, CEUR 3428.
11. Della Schiava A, Piazza C, Romanello R. (2023). Graph-Theoretical Arguments in Support of a Quantum Declarative Manifesto. *Proceedings of CILC2023*, CEUR 3428.
12. Casagrande A, Gentilini R, Piazza C, Policriti A. (2022). Hybrid automata in systems biology. In *Systems Biology Modelling and Analysis: Formal Bioinformatics Methods and Tools*, 305-338.
13. Piazza C, Romanello R. (2022). Mirrors and Memory in Quantum Automata. *Proceedings of QEST2022*, LNCS 13479, 359-380.
14. Della Giustina D, Piazza C, Riccardi B, Romanello R. (2022). Directed Graph Encoding in Quantum Computing Supporting Edge-Failures. *Proceedings of RC2022*, LNCS 13354, 75-92.
15. Ressi D, Romanello R, Rossi S, Piazza C. (2022). Neural Networks Reduction via Lumping. *Proceedings of AIxIA2022*. LNCS 13796, 75-90.
16. Casagrande A, Gentilini R, Piazza C, Policriti A. (2022). Hybrid Automata in Systems Biology. Chapter in *Systems Biology Modelling and Analysis: Formal Bioinformatics and Tools*, 305-337. Wiley.
17. Rossi N, Colautti A, Iacumin L, Piazza C. (2022). WGA-LP: a pipeline for whole genome assembly of contaminated reads. *Bioinformatics*, 38(3), 846–848.
18. Casagrande A, Dang T, Dorigo L, Dreossi T, Piazza C, Pippia E. (2022) Parameter synthesis of polynomial dynamical systems. *Information and Computation*, 289(A), 104941.
19. Pellizzari L, Rossi N, Verardo M, Spizzo R, Piazza C, Puglisi F, Gerratana L. (2021). Feasibility of an automated data solution for Binary Alignment Map (BAM) files generated through next generation sequencing (NGS) of circulating tumor DNA (ctDNA). *Annals of Oncology*, 32 (S5), S1219.
20. Marin A, Piazza C, Rossi S. (2021). D\_PSNl: Delimited persistent stochastic non-interference. *Theoretical Computer Science*, 884, 116-135.
21. Marin A, Piazza C, Rossi S. (2021). Proportional lumpability and proportional bisimilarity. *Acta Informatica*, 59(2-3), 211-244.
22. Piazza C, Rossi S. (2021). Reasoning About Proportional Lumpability. *Proceedings of QEST2021*, LNCS 12846, 372-390.
23. Hillston J, Marin A, Piazza C, Rossi S. (2021). Persistent Stochastic Non-Interference. *Fundamenta Informaticae*, 181(1), 1-35.

**According to law 679/2016 of the Regulation of the European Parliament of 27th April 2016, I hereby express my consent to process and use my data provided in this CV**

Udine, 07.04.2024

Signature