


## PERSONAL INFORMATION

**Alessandro De Piccoli** [alessandro.deplicoli@unimi.it](mailto:alessandro.deplicoli@unimi.it) <https://homes.di.unimi.it/deplicoli> <https://github.com/ale-depi> <https://gitlab.di.unimi.it/alessandro.deplicoli> [ORCID 0000-0002-6399-3164](https://orcid.org/0000-0002-6399-3164)

## WORK EXPERIENCE

2021 – 2022 **Mathematics tutor**

Tutoring for students having mathematical Additional Training Obligations resulting from the entry test of *Università degli Studi di Milano*. – 80 hours

2008 – 2022 **Science Teacher**

Private lessons of mathematics to students of bachelor degree in biology and chemistry. Private lessons of mathematics and physics to students of high school.

2012 – 2016 **Music Teacher**

Private lessons of classical guitar for the music school *Esacordo*, Cabiato (CO).

2009 – 2012 **Music Teacher**

Private lessons of classical guitar for the music school *La Consonanza*, Varedo (MB).

## EDUCATION AND TRAINING

2018 – 2021 **PhD in Computer Science**

Università degli Studi di Milano, Italia

Thesis: Optimized representations in cryptographic primitives

2011 – 2018 **Master of Science in Mathematics**

Università degli Studi di Milano, Italia

Thesis Title: *High-speed cryptography: new results*

2009 – 2011 **General Musical Culture**

Conservatorio *Luca Marenzio* di Darfo Boario Terme (BS)

2007 – 2011 **Bachelor of Science in Mathematics**

Università degli Studi di Milano, Italia

Thesis Title: *Algebraic plane curves of order 3*

2009 **Lower diploma in Guitar**

Conservatorio *Luca Marenzio* di Darfo Boario Terme (BS)

2002 – 2007 **Scientific High School Diploma**

Liceo Scientifico *Ettore Majorana*, Desio (MB)

## 2006 License of Music Theory and Solfeggio

Conservatorio *Lucio Campiani* di Mantova (MN)

### PERSONAL SKILLS

Mother tongue Italian, Spanish

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	B2	B2	B2	B2	B2
Cambridge FCE (First Certificate in English)					

Levels: A1 and A2: Basic user – B1 and B2: Independent user – C1 and C2: Proficient user  
[Common European Framework of Reference for Languages](#)

Computer skills Languages and working periods.

- C: 2007 programming course 1 (bachelor of science in mathematics), 2010 algorithms course (bachelor of science in mathematics), 2018 – today
- HTML: 2019 – today (self-taught)
- Java: 2013 programming course 2 (master of science in mathematics), 2015 programming course 3 (master of science in mathematics)
- $\LaTeX$ : 2009 – today (self-taught)
- Lilypond: 2015 – today (self-taught for personal interest)
- Python: 2019 – today (self-taught)

Driving licence B

### PUBLICATIONS

- [1] **Alessandro De Piccoli**, Andrea Visconti, and Ottavio Giulio Rizzo. “Polynomial multiplication over binary finite fields: new upper bounds”. In: *Journal of Cryptographic Engineering* 10.3 (Sept. 2020), pp. 197–210. ISSN: 2190-8516. DOI: 10.1007/s13389-019-00210-w.
- [2] Emanuele Bellini, **Alessandro De Piccoli**, Rusydi Makarim, Sergio Polese, Lorenzo Riva, and Andrea Visconti. “New Records of Pre-image Search of Reduced SHA-1 Using SAT Solvers”. In: *Proceedings of the Seventh International Conference on Mathematics and Computing*. Ed. by Debasis Giri, Kim-Kwang Raymond Choo, Saminathan Ponnusamy, Weizhi Meng, Sedat Akleylek, and Santi Prasad Maity. Singapore: Springer Singapore, 2022, pp. 141–151. ISBN: 978-981-16-6890-6. DOI: 10.1007/978-981-16-6890-6\_11.
- [3] Michela Ceria, **Alessandro De Piccoli**, Martino Tiziani, and Andrea Visconti. “Optimizing the Key-Pair Generation Phase of McEliece Cryptosystem”. In: *4th International Conference on Wireless, Intelligent and Distributed Environment for Communication*. Ed. by Isaac Woungang and Sanjay Kumar Dhurandher. Cham: Springer International Publishing, 2022, pp. 111–122. ISBN: 978-3-030-89776-5. DOI: 10.1007/978-3-030-89776-5\_8.
- [4] Rohon Kundu, **Alessandro De Piccoli**, and Andrea Visconti. “Public Key Compression and Fast Polynomial Multiplication for NTRU using the Corrected Hybridized NTT-Karatsuba Method”. In: *Proceedings of the 8th International Conference on Information Systems Security and Privacy - ICISSP, INSTICC*. SciTePress, 2022, pp. 145–153. ISBN: 978-989-758-553-1. DOI: 10.5220/0010881300003120.