



Miguel Ceriani, Ph.D.

✉ miguel.ceriani@gmail.com

📄 dblp

📖 Google Scholar

🌐 miguel76

📄 Scopus

🌐 miguel-ceriani

📄 ORCID

Full Name: Michele Geremia Ceriani (Italian documents) or Miguel Jeremias Ceriani (Argentinian documents).

Current position: Researcher in the Semantic Technology Laboratory (STLab), part of the Institute for Cognitive Sciences and Technologies (ISTC) of the Italian National Research Council (CNR)

Born: 4th May 1976 in Rosario (Argentina)

Citizenship: Italian-Argentinian

Education: MS and PhD in Computer Science at Sapienza, University of Rome, Fellow of HEA (UKPSF)

Short Bio:

I have been programming since I was 11 years old (with C64 BASIC and early Mac's HyperCard) and started working professionally as a developer (especially on web-based applications) in 2001.

Since 2010 I have been working in academic and research institutions researching topics related to **semantic technologies** (knowledge graphs, linked data, ontologies), both in general (trying to lower the barriers for adoption by non-experts) and applied to diverse specific application domains. I have also been working on **computational genomics**. I have been teaching in high schools and academy courses on a diverse set of computer science topics. I have been supervisor for many Bachelor's theses and co-supervisor for a PhD.




Education

- 2019 📖 **Fellow of Higher Education Academy, UK**
- 2015 📖 **Ph.D. in Computer Science, Sapienza Università di Roma**
- 2005 📖 **M.Sc. Computer Science, Sapienza Università di Roma**




Research Experience

- Jul 2023 – now 📖 **Researcher,**
Semantic Technologies Laboratory (STLab), Institute of Cognitive Sciences and Technologies (ISTC), National Research Council (CNR), Italy
- Oct 2019 – Jul 2023 📖 **Assistant Professor (RTD-A),**
Dept. of Computer Science, University of Bari "Aldo Moro", Italy
- Mar 2019 – Sep 2019 📖 **PostDoc (Assegno di Ricerca),**
Dept. of Computer, Control, and Management Engineering Antonio Ruberti (DIAG), Sapienza University of Rome, Italy
- Jun 2017 – Feb 2019 📖 **PostDoc,**
Centre for Digital Music, School of Electronic Engineering and Computer Science (EECS), Queen Mary University of London, United Kingdom
- Nov 2010 – May 2017 📖 **Ph.D. Student and PostDoc (Assegno di Ricerca)**
Dept. of Computer Science and Dept. of Communication and Social Research, Sapienza University of Rome, Italy
- Nov 2005 – Oct 2008 📖 **Undergraduate Researcher**
Dept. of Biochemistry, Sapienza University of Rome, Italy

Other Work Experience

- Sep 2008 – Jan 2017  **Substitute Teacher in Computer Science and Math**,
High schools in Rome, Italy
- Dec 2009 – Dec 2010  **Webmaster and System Administrator**,
Associazione Italiana per l'Agricoltura Biologica (AIAB).
- Feb 2001 – Sep 2005  **Web Developer**,
CGI S.p.A and Niuma srl, Rome, Italy

Academic Teaching

- 2021/22  **Linked Data**
PhD programme in Computer Science and Mathematics, University of Bari "Aldo Moro", Italy.
- 2019/20 – 2021/22  **Databases (3 editions)**
Bachelor's programme "Computer Science and Digital Communication", University of Bari "Aldo Moro", Italy.
- 2021/22  **Databases**
Master's programme "Bioinformatics", University of Bari "Aldo Moro", Italy.
- 2017/18  **Website Design and Authoring**
School of Electronic Engineering and Computer Science (EECS), Queen Mary University of London, United Kingdom.
- 2016/17  **Computer Science and Digital Communication Technologies**
Bachelor's programme "Public and corporate communication", Sapienza University of Rome, Italy.
- 2016  **Ontologies on the Web**
Master's programme "Computer Engineering", Buenos Aires Institute of Technology (ITBA), Argentina.

Partecipation to Research Projects

- Sep 2023 – now  **Hybrid Human Artificial Collective Intelligence in Open-Ended Domains (HACID)**
funded by the European Commission under the Horizon Europe Programme
- Jul 2023 – now  **Fostering Open Science in Social Science Research (FOSSR)**
funded by the Italian "National Recovery and Resilience Plan" (PNRR), part of Next Generation EU
- Oct 2019 – Jul 2023  **Computational Methods for the Web Economy**
funded by the European Commission as part of the "National Operational Programme on Research and Innovation"
- Mar 2019 – Sep 2019  **EcoDigit**
funded by Regione Lazio, Italy.
- Jun 2017 – Feb 2019  **Audio Commons**
funded by the European Commission under the Horizon 2020 program.
- Sep 2011 – Dec 2014  **INTOUCH – Tavoli Multimediali Interattivi**
funded by Regione Lazio, Italy.

Languages

Spanish	🔖	native
Italian	🔖	native-like
English	🔖	good command and proficiency in scientific and technical writing

Technical Skills

(Semantic) Web	🔖	HTTP, HTML, CSS, XML, JSON, RDF(S), OWL, JSON-LD, LDP, SOLID, ...
Programming	🔖	JAVASCRIPT (BROWSER/NODE.JS), TYPESCRIPT, JAVA, PYTHON, R, PHP, ...
Query/Template	🔖	SQL, SPARQL, XPATH, XSLT, RML, JQ, ...

Publications

Journal articles

- 1 E. Bernasconi, **M. Ceriani**, and S. Ferilli, "LPG semantic ontologies: A tool for interoperable schema creation and management," *Information*, vol. 15, no. 9, p. 565, 2024. 🔗 DOI: 10.3390/INFO15090565.
- 2 E. Bernasconi, **M. Ceriani**, D. Di Pierro, S. Ferilli, and D. Redavid, "Linked data interfaces: A survey," *Information*, vol. 14, no. 9, 2023, ISSN: 2078-2489. 🔗 DOI: 10.3390/info14090483.
- 3 **M. Ceriani**, F. Viola, S. Rudan, F. Antoniazzi, M. Barthet, and G. Fazekas, "Semantic integration of audio content providers through the audio commons ontology," *Journal of Web Semantics*, vol. 77, p. 100787, 2023, ISSN: 1570-8268. 🔗 DOI: <https://doi.org/10.1016/j.websem.2023.100787>.
- 4 E. Bernasconi, **M. Ceriani**, M. Mecella, and T. Catarci, "Design, realization, and user evaluation of the arca system for exploring a digital library," *International Journal on Digital Libraries*, 2022, ISSN: 1432-1300. 🔗 DOI: 10.1007/s00799-022-00343-0.
- 5 **M. Ceriani** and P. Bottoni, "A dataflow platform for applications based on linked data," *International Journal of Computational Science and Engineering (IJCSE)*, vol. 16, no. 4, pp. 419–429, 2018. 🔗 DOI: 10.1504/IJCSE.2018.10014964.
- 6 **M. Ceriani** and P. Bottoni, "Sparqlblocks: Using blocks to design structured linked data queries," *Journal of Visual Languages and Sentient Systems*, vol. 3, pp. 1–21, 2017. 🔗 URL: <http://ksiresearch.org/vlss/journal/VLSS2017/vlss-2017-ceriani-bottoni.pdf>.
- 7 P. Bottoni, K. Kanev, N. N. Mirenkov, and **M. Ceriani**, "A framework for situated interaction with augmented surfaces," *International Journal of Software and Informatics*, vol. 9, no. 3, pp. 307–329, 2015. 🔗 URL: <https://dblp.org/rec/journals/ijsi/BottoniKMC15.html>.
- 8 P. Bottoni and **M. Ceriani**, "SWOWS and dynamic queries to build browsing applications on linked data," *Journal of Visual Languages & Computing*, vol. 25, no. 6, pp. 738–744, 2014. 🔗 DOI: 10.1016/j.jvlc.2014.10.027.
- 9 D. Cozzetto, A. Kryshtafovych, **M. Ceriani**, and A. Tramontano, "Assessment of predictions in the model quality assessment category," *Proteins: Structure, Function, and Bioinformatics*, vol. 69, no. S8, pp. 175–183, 2007. 🔗 DOI: 10.1002/prot.21669.

Conference and Workshop Papers (selection)

- 1 A. S. Lippolis, M. J. Saeedizade, R. Keskiä, *et al.*, "Ontology generation using large language models," in *The Semantic Web - 22nd European Semantic Web Conference, ESWC 2025, Portoroz, Slovenia, June 1-5, 2025, Proceedings, Part I*, ser. Lecture Notes in Computer Science, vol. 15718, Springer, 2025, pp. 321–341. 🔗 DOI: 10.1007/978-3-031-94575-5_18.

- 2 L. Asprino and **M. Ceriani**, “How is your knowledge graph used: Content-centric analysis of sparql query logs,” in *The Semantic Web – ISWC 2023*, T. R. Payne, V. Presutti, G. Qi, *et al.*, Eds., Cham: Springer Nature Switzerland, 2023, pp. 197–215, ISBN: 978-3-031-47240-4. [DOI](#): 10.1007/978-3-031-47240-4_11.
- 3 M. A. Stranisci, E. Bernasconi, V. Patti, S. Ferilli, **M. Ceriani**, and R. Damiano, “The world literature knowledge graph,” in *The Semantic Web – ISWC 2023*, T. R. Payne, V. Presutti, G. Qi, *et al.*, Eds., Cham: Springer Nature Switzerland, 2023, pp. 435–452, ISBN: 978-3-031-47243-5. [DOI](#): 10.1007/978-3-031-47243-5_24.
- 4 E. Bernasconi, **M. Ceriani**, M. Mecella, F. D. Luzi, and F. Sapio, “Storybook. automatic generation of book trailers,” in *AVI 2022: International Conference on Advanced Visual Interfaces, Frascati, Rome, Italy, June 6 - 10, 2022*, ACM, 2022, 52:1–52:3. [DOI](#): 10.1145/3531073.3534477.
- 5 E. Bernasconi, **M. Ceriani**, M. Mecella, and A. Morvillo, “Automatic knowledge extraction from a digital library and collaborative validation,” in *Linking Theory and Practice of Digital Libraries - 26th International Conference on Theory and Practice of Digital Libraries, TPDL 2022, Padua, Italy, September 20-23, 2022, Proceedings*, ser. Lecture Notes in Computer Science, vol. 13541, Springer, 2022, pp. 480–484. [DOI](#): 10.1007/978-3-031-16802-4_49.
- 6 E. Bernasconi, **M. Ceriani**, M. Mecella, *et al.*, “ARCA. semantic exploration of a bookstore,” in *AVI ’20: International Conference on Advanced Visual Interfaces, Island of Ischia, Italy, September 28 - October 2, 2020*, ACM, 2020, 78:1–78:3. [DOI](#): 10.1145/3399715.3399939.
- 7 **M. Ceriani** and G. Fazekas, “Audio commons ontology: A data model for an audio content ecosystem,” in *The Semantic Web - ISWC 2018 - 17th International Semantic Web Conference, Monterey, CA, USA, October 8-12, 2018, Proceedings, Part II*, ser. Lecture Notes in Computer Science, vol. 11137, Springer, 2018, pp. 20–35. [DOI](#): 10.1007/978-3-030-00668-6_2.
- 8 **M. Ceriani** and A. A. Vaisman, “An RDF vocabulary for meta-programming with SPARQL algebra,” in *Proceedings of the 10th Alberto Mendelzon International Workshop on Foundations of Data Management, Panama City, Panama, May 8-10, 2016*, ser. CEUR Workshop Proceedings, vol. 1644, CEUR-WS.org, 2016. [URL](#): <http://ceur-ws.org/Vol-1644/paper12.pdf>.
- 9 **M. Ceriani**, P. Bottoni, S. Ventura, and A. Talamo, “Collaborative multimedia content creation and sharing by older adults,” in *International Working Conference on Advanced Visual Interfaces, AVI 2014, Como, Italy, May 27-29, 2014*, ACM, 2014, pp. 345–346. [DOI](#): 10.1145/2598153.2600029.