Federico Igne

Personal Information

Name	Federico Igne
Email	email@federicoigne.com
Website	www.federicoigne.com
ORCiD	0000-0002-2790-7513
LinkedIn	in/dyamon
GitHub	@dyamon

Interests

Artificial Intelligence · Automated Reasoning · Semantic Web · Robotics

Languages

Italian	*native speaker*
English	*highly proficient in both spoken and written language*

Programming Languages

Scala · Rust · C · Lua · Python

Education

2018–ongoing — **DPhil in Computer Science**, University of Oxford, UK.
in collaboration with SIRIUS Research Centre, University of Oslo, Norway.
Research topic: *Conjunctive query answering over unrestricted OWL 2 ontologies.*
Supervisors: Prof. Ian Horrocks, Dr Stefano Germano

2020–ongoing — **IT Officer at OxRAM**
Oxford robotics and 3D printing society within the University of Oxford.
Project: *OxRAMSociety/RobotArm*

Spring 2018 — *3–month* **Research Programme abroad**
at KR, Logic and Advanced Programming Laboratory, Department of Computer Science, New Mexico State University, Las Cruces, NM, USA.
Research topic: *Development of a distributed ASP solver based on MapReduce paradigm.*
Supervisors: Prof. Enrico Pontelli, Prof. Agostino Dovier

2015–17 — **Master's Degree in Computer Science**, University of Udine, Italy.
Final mark: **110**/110 **cum laude**
Thesis title: *Analysis and development of a distributed ASP solver with MapReduce*
Supervisors: Prof. Agostino Dovier, Prof. Enrico Pontelli

Spring 2017 — *3–month* **Master's Thesis Research Programme abroad**
at KR, Logic and Advanced Programming Laboratory, Department of Computer Science, New Mexico State University, Las Cruces, NM, USA.
Research topic: *Development of a distributed ASP solver based on MapReduce paradigm.*
Supervisors: Prof. Enrico Pontelli, Prof. Agostino Dovier

2012–17 **Scuola Superiore dell'Università degli Studi di Udine**,
advanced school of studies within the University of Udine, Italy.
Final mark: **110**/110
Class: *Science and Economics*
Tutor: Prof. Agostino Dovier

2012–15 **Bachelor's Degree in Computer Science**, University of Udine, Italy.
Final mark: **110**/110 **cum laude**
Thesis title: *Linguaggi logici per la rappresentazione della conoscenza e loro applicazione alla codifica di rompicapi*
Supervisor: Prof. Agostino Dovier

Attended conferences and events

2021 KR 2021, *18th International Conference on Principles of Knowledge Representation and Reasoning*, November 3–12, Virtual conference
ISWC 2021, *20th International Semantic Web Conference*, October 24–28, Virtual conference
DL 2021, *34th International Workshop on Description Logics*, September 19–22, Bratislava, Slovakia
2019 ISWS 2019, *International Web Semantic Research School*, June 30–July 7, Bertinoro, Italy
CILC 2019, *34th Italian Conference on Computational Logic*, June 19–21, Trieste, Italy
2018 FLOC 2018, *Federated Logic Conference*, July 6–19, Oxford, UK
ICLP 2018, *34th International Conference on Logic Programming* as part of FLOC 2018, July 14–17, Oxford, UK
PLR 2018, *1st International Workshop on Parallel Logic Reasoning* as part of FLOC 2018, July 18, Oxford, UK
2015 CILC 2015, *30th Italian Conference on Computational Logic*, July 1–3, Genova, Italy
CILC School 2015, associated with *30th Italian Conference on Computational Logic*, June 29–30 July 1, Genova, Italy

Publications

Igne, Federico, Stefano Germano, and Ian Horrocks (2021a). "Computing CQ Lower-Bounds over OWL 2 Through Approximation to RSA". In: *The Semantic Web - ISWC 2021 - 20th International Semantic Web Conference, ISWC 2021, Virtual Event, October 24-28, 2021, Proceedings*. Ed. by Andreas Hotho, Eva Blomqvist, Stefan Dietze, Achille Fokoue, Ying Ding, Payam M. Barnaghi, Armin Haller, Mauro Dragoni, and Harith Alani. Vol. 12922. Lecture Notes in Computer Science. Springer, pp. 200–216. DOI: 10.1007/978-3-030-88361-4_12. URL: https://doi.org/10.1007/978-3-030-88361-4%5C_12.

— (2021b). "Computing CQ lower-bounds over OWL 2 through approximation to RSA". In: *CoRR* abs/2107.00369. arXiv: 2107.00369. URL: https://arxiv.org/abs/2107.00369.

— (2021c). "Computing CQ lower-bounds over OWL 2 through approximation to RSA - Extended Abstract". In: *Proceedings of the ISWC 2021 Posters, Demos and Industry Tracks: From Novel Ideas to Industrial Practice co-located with 20th International Semantic Web Conference (ISWC 2021), Virtual Conference, October 24-28, 2021*. Ed. by Oshani Seneviratne, Catia Pesquita, Juan Sequeda, and Lorena Etcheverry. Vol. 2980. CEUR Workshop Proceedings. CEUR-WS.org. URL: http://ceur-ws.org/Vol-2980/paper323.pdf.

— (2021d). "RSAComb: Combined Approach for CQ Answering in RSA". In: *Proceedings of the 34th International Workshop on Description Logics (DL 2021) part of Bratislava Knowledge September (BAKS 2021), Bratislava, Slovakia, September 19th to 22nd, 2021*. Ed. by Martin Homola, Vladislav Ryzhikov, and Renate A. Schmidt. Vol. 2954. CEUR Workshop Proceedings. CEUR-WS.org. URL: http://ceur-ws.org/Vol-2954/paper-18.pdf.

Bortoli, Marco De, Federico Igne, Fabio Tardivo, Pietro Totis, Agostino Dovier, and Enrico Pontelli (2019). "Towards Distributed Computation of Answer Sets". In: *Proceedings of the 34th Italian Conference on Computational Logic, Trieste, Italy, June 19-21, 2019*. Ed. by Alberto Casagrande and Eugenio G. Omodeo. Vol. 2396. CEUR Workshop Proceedings. CEUR-WS.org, pp. 316–326. URL: http://ceur-ws.org/Vol-2396/paper36.pdf.

Geatti, Luca, Federico Igne, and Marino Miculan (2019). "An Abstract Distributed Middleware for Transactions over Heterogeneous Stores". In: *Proceedings of the 20th Italian Conference on Theoretical Computer Science, ICTCS 2019, Como, Italy, September 9-11, 2019*. Ed. by Alessandra Cherubini, Nicoletta Sabadini, and Simone Tini. Vol. 2504. CEUR Workshop Proceedings. CEUR-WS.org, pp. 171–183. URL: http://ceur-ws.org/Vol-2504/paper20.pdf.

Igne, Federico, Agostino Dovier, and Enrico Pontelli (2018). "MASP-Reduce: A Proposal for Distributed Computation of Stable Models". In: *Technical Communications of the 34th International Conference on Logic Programming, ICLP 2018, July 14-17, 2018, Oxford, United Kingdom*. Ed. by Alessandro Dal Palù, Paul Tarau, Neda Saeedloei, and Paul Fodor. Vol. 64. OASICS. Schloss Dagstuhl - Leibniz-Zentrum für Informatik, 8:1–8:4. DOI: 10.4230/OASIcs.ICLP.2018.8. URL: https://doi.org/10.4230/OASIcs.ICLP.2018.8.