Dr. Davide Lanti

Curriculum Vitae

March 2021

Born in Teramo, Italy, in 1986.

Education

2014–2018   Ph.D. in Computer Science, Free University of Bozen-Bolzano, Italy.

2010–2013   Master Degree in Computational Logic, joint degree between Technische Universität Dresden (Germany) and Free University of Bozen-Bolzano (Italy). Graduation with 1.3/1.0.

2006–2010   Bachelor Degree in Computer Science, Università de L'Aquila, Italy. Graduation with 110/110 cum laudae.

Languages:

Languages

- Italian, native.

- English, C1.

Research Interests

Davide Lanti is a postdoc at the Research Centre for Knowledge and Data (KRDB) at the Faculty of Computer Science of the Free University of Bozen-Bolzano, where he carries out research on practical aspects of Ontology-based Data Access (OBDA), which is a research area across database theory, knowledge representation, and semantic web, concerned about how to provide effective access to large amounts of legacy data through a mediating ontology.

Teaching Activity (Format: A.Y. YYYY/YYYY: Course Name, Role, Course Level, Language)

- A.Y. 2020/2021: Semantic Technologies and Linked Data, Teacher, Master's Degree, English.

- A.Y. 2020/2021: Introduction to Databases, Teaching Assistant, Bachelor's Degree, English.

- A.Y. 2019/2020: Introduction to Databases, Teaching Assistant, Bachelor's Degree, English.

- A.Y. 2019/2020: Programming Paradigms, Teaching Assistant, Bachelor's Degree, English.

- A.Y. 2018/2019: Introduction to Databases, Teaching Assistant, Bachelor's Degree, English.

- A.Y. 2018/2019: Intelligent Systems, Teaching Assistant, Bachelor's Degree, Italian.

- A.Y. 2017/2018: Knowledge Representation and Ontologies, Teaching Assistant, Master's Degree, English.

- A.Y. 2017/2018: Intelligent Systems, Teaching Assistant, Bachelor's Degree, Italian.

- A.Y. 2017/2016: Operating Systems, Teaching Assistant, Bachelor's Degree, English.

Known Programming Languages

- `Procedural and OO`: Good knowledge of Java. Fair knowledge of C++ (03) and C (99). Fair knowledge of Ruby.

- `Functional, Logic, Parallel`: Fair knowledge of Lisp, Haskell, OcaML, Prolog, ASP, and Erlang.

- `Web`: Fair knowledge of PHP.

- `Constraint Programming`: Fair knowledge of ECLiPSe.

- `Script`: Good knowledge of Bash.

GitHub Projects

- `GitHub`: https://github.com/tirrolo

- `Main Own GitHub Projects`:

    - https://github.com/ontop/npd-benchmark
    - https://github.com/ontop/vig
    - https://github.com/ontop/obda-mixer

- `Main Collaborations in GitHub Projects`:

    - https://github.com/ontop

Institutional Duties

In 2015/2016 he has been the Ph.D. students' representative of the faculty of Computer Science at the Free University of Bozen-Bolzano.

Projects Participation (Contracts)

2020–ongoing   European Union's Horizon 2020 Research and Innovation Program, Intelligent Open Data Exploration (INODE), grant agreement n. 863410.

2019–2020   KENDO - Call+StyLoLA

2017–2018   Knowledge-driven Enterprise Distributed cOmputing (KENDO)

Internships and Research Visits

2016   Visiting Ph.D. student at the French Institute for Research in Computer Science (INRIA), Saclay-Paris, France.

2012–2013   Intern at SAP A.G., Dresden, Germany.

Prizes

- 2018   Best PhD Student Award at the Faculty of Computer Science of the Free University of Bozen-Bolzano (Italy).

- 2015   Best Doctoral Consortium Contribution Award at the 9th International Conference on Web Reasoning and Rule Systems (RR).

Selected Publications

Papers in Refereed International Journals

[JI-1] D. Lanti, Guohui Xiao, and Diego Calvanese. VIG: Data scaling for OBDA benchmarks. *Semantic Web Journal*, 10(2):413–433, 2019. DOI: 10.3233/SW-180336.

[JI-2] Evgeny Kharlamov, Dag Hovland, Martin G. Skjæveland, Dimitris Bilidas, Ernesto Jiménez-Ruiz, Guohui Xiao, Ahmet Soylu, *Davide Lanti*, Martin Rezk, Dmitriy Zheleznyakov, Martin Giese, Hallstein Lie, Yannis E. Ioannidis, Yannis Kotidis, Manolis Koubarakis, and Arild Waaler. Ontology based data access in statoil. *J. Web Sem.*, 44:3–36, 2017. DOI: 10.1016/j.websem.2017.05.005.

[JI-3] Martin Giese, Ahmet Soylu, Guillermo Vega-Gorgojo, Arild Waaler, Peter Haase, Ernesto Jiménez-Ruiz, *Davide Lanti*, Martín Rezk, Guohui Xiao, Özgür L. Özçep, and Riccardo Rosati. Optique: Zooming in on big data. *IEEE Computer*, 48(3):60–67, 2015. DOI: 10.1109/MC.2015.82.

[JI-4] Diego Calvanese, Benjamin Cogrel, Sarah Komla-Ebri, Roman Kontchakov, *Davide Lanti*, Martin Rezk, Mariano Rodriguez-Muro, and Guohui Xiao. Ontop: Answering SPARQL queries over relational databases. *Semantic Web*, 8(3):471–487, 2017. DOI: 10.3233/SW-160217.

Papers in Refereed International Conferences

[CI-1] Guohui Xiao, Davide Lanti, Roman Kontchakov, Sarah Komla-Ebri, Elem Güzel-Kalayci, Linfang Ding, Julien Corman, Benjamin Cogrel, Diego Calvanese, and Elena Botoeva. The virtual knowledge graph system ontop. In *Proc. of the 19th Int. Semantic Web Conf. (ISWC 2020)*, Lecture Notes in Computer Science. Springer, 2020.

[CI-2] Diego Calvanese, Julien Corman, Davide Lanti, and Simon Razniewski. Counting query answers over a DL-Lite knowledge base. In *Proc. of the 29th Int. Joint Conf. on Artificial Intelligence (IJCAI)*, pages 1658–1666. IJCAI Org., 2020. DOI: 10.24963/ijcai.2020/230.

[CI-3] Diego Calvanese, Davide Lanti, Ana Ozaki, Rafael Peñaloza, and Guohui Xiao. Enriching ontology-based data access with provenance. In *Proc. of the 28th Int. Joint Conf. on Artificial Intelligence (IJCAI)*, pages 1616–1623. Int. Joint Conf. on Artificial Intelligence Org., 2019. DOI: 10.24963/ijcai.2019/224.

[CI-4] *Davide Lanti*, Guohui Xiao, and Diego Calvanese. Cost-driven ontology-based data access. In *Proc. of the 15th Int. Semantic Web Conf. (ISWC 2017)*, pages 452–470, 2017. DOI: 10.1007/978-3-319-68288-4_27.

[CI-5] *Davide Lanti* and Norbert Manthey. Sharing information in parallel search with search space partitioning. In *Proceedings of the 7th International Conference on Learning and Intelligent Optimization (LION 2013)*, Lecture Notes in Computer Science. Springer, 2013.

[CI-6] *Davide Lanti*, Martin Rezk, Guohui Xiao, and Diego Calvanese. The NPD benchmark: Reality check for OBDA systems. In *Proceedings of the Eighteenth International Conference on Extending Database Technology (EDBT 2015)*, 2015.

[CI-7] Timea Bagosi, Diego Calvanese, Josef Hardi, Sarah Komla-Ebri, *Davide Lanti*, Martin Rezk, Mariano Rodriguez-Muro, Mindaugas Slusnys, and Guohui Xiao. The ontop framework for ontology based data access. In *The Semantic Web and Web Science - 8th Chinese Conference, CSWS 2014, Wuhan, China, August 8-12, 2014, Revised Selected Papers*, pages 67–77, 2014. DOI: 10.1007/978-3-662-45495-4_6.

[CI-8] Evgeny Kharlamov, Dag Hovland, Ernesto Jiménez-Ruiz, Davide Lanti, Hallstein Lie, Christoph Pinkel, Martin Rezk, Martin G. Skjæveland, Evgenij Thorstensen, Guohui Xiao, Dmitriy Zheleznyakov, and Ian Horrocks. Ontology based access to exploration data at statoil. In *Proceedings of the 14th International Semantic Web Conference (ISWC 2015)*, pages 93–112. Springer International Publishing, 2015. DOI: 10.1007/978-3-319-25010-6_6.