

Fabien Duchateau | Associate professor

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Education

Ph.D. in Computer Science <i>Université des Sciences</i> Title: <i>Towards a Generic Approach for Schema Matcher Selection: Leveraging User Pre- and Post-match Effort for Improving Quality and Time Performance (supervised by Zohra Bellahsene)</i>	2006–2009 Montpellier
Research Master in Computer Science <i>Université des Sciences</i> Thesis title: <i>Improving performance of schema matching using B-trees</i>	2005–2006 Montpellier
Engineer diploma in Computer Science <i>EPSI</i> Thesis title: <i>Designing a cooperative artificial intelligence for a tactical simulator</i>	2002–2005 Arras
Professional degree in Computer Science <i>Université d'Artois</i>	2000–2002 Lens

Work experience

Associate professor <i>Université Lyon 1 and LIRIS</i> Teaching in computer science (<i>Initiation to Databases, Computer Human Interactions, Distributed Databases and Data Integration</i>) and research within the database group	2011–present Lyon
ERCIM post-doctoral fellow <i>CWI (The Netherlands) and NTNU (Norway)</i> <i>I spent 9 months at CWI working in social events (Petamedia project). Then I spent 9 months at NTNU for applying Semantic Web technologies in the Digital Library domain</i>	2010–2011 Amsterdam, Trondheim
Teaching assistant in computer science <i>Université des Sciences</i> <i>I gave courses in databases, operating systems, data structures (Java) and learning of basic I.T. skills at different levels (from License to Master)</i>	2006–2009 Montpellier

Research experience

- **Research topics:** databases, data integration, schema and ontology matching, entity matching, semantic web, digital libraries, geospatial information systems, machine learning
- **Member of program committees:** TPDL 2013-2019, DATA 2014-2019, JCDL 2014-2017, ICET 2018, CIKM 2012 (demos)
- **External reviewer:** ICDE 2015, ESWC 2014/2012/2010, CaiSE 2011/2010, INFORSID 2011, CooPIS 2011/2009, SIGMOD 2010, EDA 2010, BDA 2009/2008, JFAO 2009, OM 2007
- **Member of organization committees:** TPDL 2020 (General Chair), CaiSE 2008 (webmaster), OTM 2006
- **Summary of publications:** 2 books chapters, 8 journals, 18 conferences, 9 demos, 7 workshops

Computer skills

- **Databases:** MySQL, PostgreSQL, MongoDB, Oracle, SQL, XML
- **Programming languages:** Python, Java, PHP, Bash, C++
- **Web:** HTML, CSS, Bootstrap, JavaScript
- **Miscellaneous:** Latex, R, Merise, UML, Linux, MacOS

Interests and activities

- **Languages:** English (fluent), Esperanto (2nd level diploma) and German (basic)
- **Leisures:** running (trails and marathons), table tennis (15 years), hiking (West Highland Way in Scotland, part of the GR10 in France), cycling, playing guitar
- **Volunteering:** active member of an environmental organisation (2008-2013), assistant treasurer of my table tennis club (2000-2004)

References

- Zohra Bellahsène** +33 (0)4 67 41 85 35
Professor at Université Montpellier 2, LIRMM (France) *bella [at] lirmm.fr*
- Mohand Said-Hacid** +33 (0)4 72 43 27 74
Professor at Université Lyon 1, LIRIS (France) *mohand-said.hacid [at] liris.cnrs.fr*
- Trond Aalberg** +47 735 979 52
Professor at Oslomet and NTNU (Norway) *trond.aalberg [at] oslomet.no*

Publications

Book chapters

- [1] Zohra Bellahsène and Fabien Duchateau. “Tuning for Schema Matching”. In: *Schema Matching and Mapping*. Data-Centric Systems and Applications, Springer, 2011. Chap. 10, pp. 293–316. URL: <http://www.springer.com/computer/book/978-3-642-16517-7>.
- [2] Angela Bonifati et al. “On Evaluating Schema Matching and Mapping”. In: *Schema Matching and Mapping*. Data-Centric Systems and Applications, Springer, 2011. Chap. 9, pp. 253–291. URL: <http://www.springer.com/computer/book/978-3-642-16517-7>.

International journals

- [3] Trond Aalberg et al. “Benchmarking and evaluating the interpretation of bibliographic records”. In: *International Journal on Digital Libraries (IJDL)* (Jan. 2018), pp. 1–23. ISSN: 1432-5012. DOI: 10.1007/s00799-018-0233-2. URL: <https://doi.org/10.1007/s00799-018-0233-2>.
- [4] Fabien Duchateau and Zohra Bellahsène. “YAM: A Step Forward for Generating a Dedicated Schema Matcher”. In: *Trans. Large-Scale Data- and Knowledge-Centered Systems (TLDKS)* 25 (2016), pp. 150–185. DOI: 10.1007/978-3-662-49534-6_5. URL: http://dx.doi.org/10.1007/978-3-662-49534-6_5.
- [5] Bilal Berjawi et al. “Uncertainty visualization of multi-providers cartographic integration”. en. In: *Journal of Visual Languages and Computing* 25.6 (Dec. 2014), pp. 995–1002. ISSN: 1045-926X. DOI: <http://dx.doi.org/10.1016/j.jvlc.2014.10.033>.
- [6] Fabien Duchateau and Zohra Bellahsène. “Designing a Benchmark for the Assessment of Schema Matching Tools”. In: *Open Journal of Databases (OJDB)*. Vol. 1. 1. RonPub, Germany, 2014, pp. 3–25. URL: https://www.ronpub.com/journals/ojdb/2014-vol1/issue1/OJDB-v1i1n02_Duchateau.pdf.

- [7] Naimdjon Takhirov et al. "FRBR-ML: A FRBR-based Framework for Semantic Interoperability". In: *Journal of Semantic Web* 3.1 (2012), pp. 23–43. ISSN: 1570-0844. URL: <http://dx.doi.org/10.3233/SW-2012-0044>.
- [8] Zohra Bellahsene et al. "FORUM: a Flexible Data Integration System". In: *SIGMOD Record*. Vol. 39. 2. 2010, pp. 11–18. URL: <http://www.sigmod.org/publications/sigmod-record/1006/04.article.bellahsene.pdf>.

National journals

- [9] Fabien Duchateau, Nicolas Lumineau, and Trond Aalberg. "Impact des données ouvertes et liées sur les catalogues bibliographiques". In: *Ingénierie des Systèmes d'Information (ISI)* 23.3-4 (2018), pp. 57–93. DOI: 10.3166/ISI.23.3-4.57-93. URL: <https://isi.revuesonline.com/resnum.jsp?editionId=3498>.
- [10] Fabien Duchateau, Zohra Bellahsene, and Mathieu Roche. "Improving quality and performance of schema matching in large scale". In: *Ingénierie des Systèmes d'Information (ISI)* 13.5 (2008), pp. 59–82. URL: <http://dx.doi.org/10.3166/isi.13.5.59-82>.

International conferences

- [11] Léonor Ferrer Catala et al. "Visualizing Integration Uncertainty Enhances User's Choice in Multi-Providers Integrated Maps". In: *Advanced Visual Interfaces (AVI)*. AVI '16. Bari, Italy: ACM, 2016, pp. 298–299. ISBN: 978-1-4503-4131-8. DOI: 10.1145/2909132.2926075. URL: <http://doi.acm.org/10.1145/2909132.2926075>.
- [12] Joffrey Decourselle, Fabien Duchateau, and Ronald Ganier. "Syrtis: New Perspectives for Semantic Web Adoption". In: *BOBCATSSS*. Lyon, France, Jan. 2016. URL: <https://hal.archives-ouvertes.fr/hal-01258556>.
- [13] Joffrey Decourselle et al. "BIB-R: A Benchmark for the Interpretation of Bibliographic Records". In: *Theory and Practice of Digital Libraries (TPDL)*. 2016, pp. 163–174. DOI: 10.1007/978-3-319-43997-6_13. URL: http://dx.doi.org/10.1007/978-3-319-43997-6_13.
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- [15] Bilal Berjawi et al. "PABench: Designing a Taxonomy and Implementing a Benchmark for Spatial Entity Matching". en. In: *International Conference on Advanced Geographic Information Systems, Applications, and Services (GEOProcessing)*. Feb. 2015, pp. 7–16. ISBN: 978-1-61208-048-2. URL: <http://perso.liris.cnrs.fr/publis/?id=7017>.
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- [17] Fabien Duchateau. "A Generic and Flexible Framework for Selecting Correspondences in Matching and Alignment Problems". In: *International Conference on Data Management Technologies and Applications (DATA)*. SciTePress, 2013, pp. 129–137.
- [18] Naimdjon Takhirov et al. "An Integrated Approach for Large-Scale Relation Extraction from the Web". In: *Asia-Pacific Web Conference (APWeb)*. Springer, 2013, pp. 163–175. URL: http://dx.doi.org/10.1007/978-3-642-37401-2_18.
- [19] Naimdjon Takhirov, Fabien Duchateau, and Trond Aalberg. "An Evidence-based Verification Approach to Extract Entities for Knowledge Base Population". In: *International Semantic Web Conference (ISWC)*. Springer, 2012, pp. 575–590. URL: http://dx.doi.org/10.1007/978-3-642-35176-1_36.
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- [21] Naimdjon Takhirov, Fabien Duchateau, and Trond Aalberg. "Linking FRBR Entities to LOD through Semantic Matching". In: *Theory and Practice of Digital Libraries (TPDL)*. Springer, 2011, pp. 284–295. ISBN: 978-3-642-24468-1.
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- [23] Fabien Duchateau and Zohra Bellahsene. "Measuring the Quality of an Integrated Schema". In: *Conference on Conceptual Modelling (ER)*. 2010, pp. 261–273. URL: http://dx.doi.org/10.1007/978-3-642-16373-9_19.
- [24] Fabien Duchateau et al. "(Not) Yet Another Matcher". In: *Conference on Information and Knowledge Management (CIKM)*. 2009, pp. 1537–1540. URL: <http://doi.acm.org/10.1145/1645953.1646165>.
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National conferences

- [27] Nadia Bennani et al. "Adnosco: Trace User Data for the User". In: *INformatique des ORganisations et Systèmes d'Information de Décision (INFORSID)*. 2014, pp. 147–162. ISBN: 2-906855-29-4.
- [28] Fabien Duchateau, Zohra Bellahsene, and Mathieu Roche. "BMatch: a Semantically Context-based Tool Enhanced by an Indexing Structure to Accelerate Schema Matching". In: *Base de Données Avancées (BDA)*. 2007.

International demos

- [29] Nelly Barret et al. "Spatial Entity Matching with GeoAlign". In: *International Conference on Advances in Geographic Information Systems (SIGSPATIAL)*. ACM, 2019, pp. 580–583.
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- [31] Naimdjon Takhirov et al. "KIEV: a Tool for Extracting Semantic Relations from the World Wide Web". In: *International Conference on Extending Database Technology (EDBT)*. OpenProceedings.org, 2014, pp. 632–635.
- [32] Fabien Duchateau, Naimdjon Takhirov, and Trond Aalberg. "FRBRPedia: a Tool for FRBRizing Web Products and Linking FRBR Entities to DBpedia". In: *Joint Conference on Digital Libraries (JCDL)*. ACM, 2011, pp. 455–456.
- [33] Naimdjon Takhirov and Fabien Duchateau. "A Cloud-based and Social Authoring Tool for Video". In: *Document Engineering (DE)*. ACM, 2011, pp. 65–68.
- [34] Fabien Duchateau et al. "YAM: a Schema Matcher Factory". In: *Conference on Information and Knowledge Management (CIKM)*. 2009, pp. 2079–2080. URL: <http://doi.acm.org/10.1145/1645953.1646311>.
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National demos

- [36] Nelly Barret et al. "À la recherche du quartier idéal". In: *Extraction et Gestion des Connaissances (EGC)*. 2019, pp. 429–432.

- [37] Fabien Duchateau et al. "Encore un outil de découverte de correspondances entre schémas XML?" In: *Bases de Données Avancées (BDA)*. 2009.

International workshops

- [38] Joffrey Decourselle et al. "A Novel Vision for Navigation and Enrichment in Cultural Heritage Collections". In: *ADBIS Workshop - Semantic Web for Cultural Heritage (SW4CH)*. Vol. 539. Springer, 2015, pp. 488–497. DOI: 10.1007/978-3-319-23201-0_49.
- [39] Bilal Berjawi et al. "Representing Uncertainty in Visual Integration". In: *Visual Language Computing (VLC) - Proceedings of Distributed Multimedia Systems (DMS)*. Knowledge Systems Institute Graduate School, 2014, pp. 365–372. ISBN: 1-891706-36-5. URL: www.ksi.edu/seke/Proceedings/dms/DMS2014_Proceedings.pdf.
- [40] Fabien Duchateau. "Who Can Best Answer a Query in my Social Network?" In: *ICDE Workshops - Data Engineering meets the Semantic Web (DesWeb)*. 2011, pp. 218–223.
- [41] Fabien Duchateau and Lynda Hardman. "Integrating and Ranking Interests From User Profiles". In: *Linking of User Profiles and Applications in the Social Semantic Web (LUPAS)*. CEUR-WS.org, 2010, pp. 28–39. URL: <http://CEUR-WS.org/Vol-595/>.
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National workshops

- [43] Loïc Bonneval et al. "Étude des quartiers : défis et pistes de recherche". In: *Extraction et Gestion des Connaissances (EGC) - atelier DAHLIA*. 2019, pp. 429–432.
- [44] Stéphanie Jean Daubias and Fabien Duchateau. "JADE : un jeu de plateau pour l'apprentissage de l'ergonomie des logiciels". In: *Colloque Evolutions Pédagogiques (CEP) (2019)*. URL: <https://cep2019.universite-lyon.fr/>.

Ph.D. thesis

- [45] F. Duchateau. "Towards a Generic Approach for Schema Matcher Selection: Leveraging User Pre- and Post-match Effort for Improving Quality and Time Performance". PhD thesis. Université Montpellier II - Sciences et Techniques du Languedoc, 2009. URL: <http://tel.archives-ouvertes.fr/tel-00436547/>.

Technical reports

- [46] Bilal Berjawi et al. *Detection, Integration and Correction Methods for Homologous Geographic Objects*. Communication IMU ALPHA. Laboratoire LIRIS, 2013. URL: <http://imualpha.hypotheses.org/99>.
- [47] Bilal Berjawi et al. *Outil de repérage urbain à travers la prise de points de repère*. Prototype. Laboratoires EVS et LIRIS, 2013. URL: <http://evs.host-ed.me/>.