

# List of Publications

Michael Cochez

October 1, 2022

A bibtex file with all my work can be found from  
<https://www.cochez.nl/papers/refs.bib>

## Peer reviewed book chapters, workshop, conference and journal papers.

1. Bo Xiong, *Michael Cochez*, Mojtaba Nayyeri, and Steffen Staab. Hyperbolic embedding inference for structured multi-label prediction. In *NeurIPS2022*, 2022. accepted
2. Ruijie Wang, Luca Rossetto, *Michael Cochez*, and Abraham Bernstein. QAGCN: A graph convolutional network-based multi-relation question answering system. In *arXiv*, 2022a. URL <https://arxiv.org/abs/2206.01818>
3. Xu Wang, Frank van Harmelen, *Michael Cochez*, editor="Memmi Gerard Huang, Zhisheng", Baijian Yang, Linghe Kong, Tianwei Zhang, and Meikang Qiu. Scientific item recommendation using a citation network. In *Knowledge Science, Engineering and Management*, pages 469–484, Cham, 2022b. Springer International Publishing. ISBN 978-3-031-10986-7
4. Taewoon Kim, *Michael Cochez*, Vincent Francois-Lavet, Mark Neerincx, and Piek Vossen. A machine with human-like memory systems. *arXiv preprint arXiv:2204.01611*, 2022. Presented at the Human-Centered Design of Symbiotic Hybrid Intelligence workshop at HHAI 2022
5. Daniel Daza, *Michael Cochez*, and Paul Groth. SlotGAN: Detecting mentions in text via adversarial distant learning. In *Proceedings of the Sixth Workshop on Structured Prediction for NLP*, pages 32–39, 2022
6. Alessandro Generale, Till Blume, and *Michael Cochez*. Scaling R-GCN training with graph summarization. *arXiv preprint arXiv:2203.02622*, 2022. To appear in the proceedings of the ACM Digital Library in the proceedings of the International Workshop on Graph Learning at the Webconf 2022
7. Simone Colombo, Dimitrios Alivanistos, and *Michael Cochez*. Potential energy to improve link prediction with relational graph neural networks. In *AAAI Spring Symposium: MAKE*, number 3121 in CEUR Workshop Proceedings, pages 1–9, 2022

8. Aidan Hogan, Eva Blomqvist, *Michael Cochez*, Claudia d’Amato, Gerard de Melo, Claudio Gutierrez, Sabrina Kirrane, José Emilio Labra Gayo, Roberto Navigli, Sebastian Neumaier, and others. Knowledge graphs. *Synthesis Lectures on Data, Semantics, and Knowledge*, 12(2):1–257, 2021a. URL <https://kgbook.org>
9. Aidan Hogan, Eva Blomqvist, *Michael Cochez*, Claudia D’amato, Gerard De Melo, Claudio Gutierrez, Sabrina Kirrane, José Emilio Labra Gayo, Roberto Navigli, Sebastian Neumaier, and others. Knowledge graphs. *ACM Comput. Surv.*, 54(4), July 2021b. ISSN 0360-0300. doi: 10.1145/3447772. URL <https://arxiv.org/abs/2003.02320>
10. Florian Barthelemy, *Michael Cochez*, Iraklis Dimitriadis, Naila Karim, Nikolaos Loutas, Ioannis Magnisalis, Lina Molinas Comet, Vassilios Peristeras, and Brecht Wyns. Towards a standard-based open data ecosystem: analysis of dcat-ap use at national and european level. *Electronic Government, an International Journal*, 18(2):137–180, 2022
11. Christopher Wewer, Florian Lemmerich, and *Michael Cochez*. Updating embeddings for dynamic knowledge graphs. *arXiv preprint arXiv:2109.10896*, 2021
12. Leandro Eichenberger, *Michael Cochez*, Benjamin Heitmann, and Stefan Decker. Secure evaluation of knowledge graph merging gain. *arXiv preprint arXiv:2103.00082*, 2021
13. Dimitrios Alivanistos, Max Berrendorf, *Michael Cochez*, and Mikhail Galkin. Query embedding on hyper-relational knowledge graphs. In *International Conference on Learning Representations (ICLR 2022)*. Openreview, 2022a. URL <https://openreview.net/forum?id=4rLw09TgRw9>
14. Md. Rezaul Karim, Jiao Jiao, Till Döhmen, *Michael Cochez*, Oya Beyan, Dietrich Rebholz-Schuhmann, and Stefan Decker. DeepKneeExplainer: Explainable knee osteoarthritis diagnosis from radiographs and magnetic resonance imaging. *IEEE Access*, 9:39757–39780, 2021. doi: 10.1109/ACCESS.2021.3062493
15. Arnab Chakrabarti, Abhijeet Das, *Michael Cochez*, and Christoph Quix. Unsupervised feature selection for efficient exploration of high dimensional data. In Ladjel Bellatreche, Marlon Dumas, Panagiotis Karras, and Raimundas Matulevičius, editors, *Advances in Databases and Information Systems*, pages 183–197, Cham, 2021. Springer International Publishing. ISBN 978-3-030-82472-3. URL [https://www.cochez.nl/papers/feature\\_selection\\_for\\_exploration.pdf](https://www.cochez.nl/papers/feature_selection_for_exploration.pdf)
16. Ruud van Bakel, Teodor Aleksiev, Daniel Daza, Dimitrios Alivanistos, and *Michael Cochez*. Approximate knowledge graph query answering: From ranking to binary classification. In *Michael Cochez*, Madalina Croitoru, Pierre Marquis, and Sebastian Rudolph, editors, *Graph Structures for Knowledge Representation and Reasoning*, pages 107–124, Cham, 2021. Springer International Publishing. ISBN 978-3-030-72308-8

17. Erik Arakelyan, Daniel Daza, Pasquale Minervini, and *Michael Cochez*. Complex query answering with neural link predictors. In *International Conference on Learning Representations (ICLR 2021)*. Openreview, 2021. URL <https://openreview.net/forum?id=Mos9F9kDwkz>. Oral presentation, spotlight paper
18. Daniel Daza, *Michael Cochez*, and Paul Groth. Inductive entity representations from text via link prediction. In *Proceedings of the Web Conference 2021*, page 798–808. Association for Computing Machinery, New York, NY, USA, 2021. ISBN 9781450383127. URL <https://arxiv.org/abs/2010.03496>
19. Md. Rezaul Karim, Till Döhmen, *Michael Cochez*, Oya Beyan, Dietrich Rebholz-Schuhmann, and Stefan Decker. DeepCOVIDExplainer: Explainable COVID-19 diagnosis from chest X-ray images. In *2020 IEEE International Conference on Bioinformatics and Biomedicine (BIBM)*, pages 1034–1037, 2020b. doi: 10.1109/BIBM49941.2020.9313304. URL <https://arxiv.org/abs/2004.04582>
20. Aidan Hogan, Eva Blomqvist, *Michael Cochez*, Claudia D’amato, Gerard De Melo, Claudio Gutierrez, Sabrina Kirrane, José Emilio Labra Gayo, Roberto Navigli, Sebastian Neumaier, and others. Knowledge graphs. *ACM Comput. Surv.*, 54(4), July 2021b. ISSN 0360-0300. doi: 10.1145/3447772. URL <https://arxiv.org/abs/2003.02320>
21. Michael Ellers, *Michael Cochez*, Tobias Schumacher, Markus Strohmaier, and Florian Lemmerich. Privacy attacks on network embeddings, 2019. URL <https://arxiv.org/abs/1912.10979>
22. Lars C. Gleim, Rafael Schimassek, Dominik Hüser, Maximilian Peters, Christoph Krämer, *Michael Cochez*, and Stefan Decker. Schematree: Maximum-likelihood property recommendation for Wikidata. In Andreas Harth, Sabrina Kirrane, Axel-Cyrille Ngonga Ngomo, Heiko Paulheim, Anisa Rula, Anna Lisa Gentile, Peter Haase, and *Michael Cochez*, editors, *The Semantic Web*, pages 179–195, Cham, 2020. Springer International Publishing. ISBN 978-3-030-49461-2
23. Maria Angela Pellegrino, Abdulrahman Altabba, Martina Garofalo, Petar Ristoski, and *Michael Cochez*. GEval: A modular and extensible evaluation framework for graph embedding techniques. In Andreas Harth, Sabrina Kirrane, Axel-Cyrille Ngonga Ngomo, Heiko Paulheim, Anisa Rula, Anna Lisa Gentile, Peter Haase, and *Michael Cochez*, editors, *The Semantic Web*, pages 565–582, Cham, 2020. Springer International Publishing. ISBN 978-3-030-49461-2
24. Ahmed Hallawa, Giovanni Iacca, Cagatay Sariman, Touhidur Rahman, *Michael Cochez*, and Gerd Ascheid. Morphological evolution for pipe inspection using robot operating system (ROS). *Materials and Manufacturing Processes*, 35(6):714–724, 2020. doi: 10.1080/10426914.2020.1746335. URL <https://doi.org/10.1080/10426914.2020.1746335>
25. Daniel Daza and *Michael Cochez*. Message passing query embedding. presented at presented at the GRL+ ICML workshop <https://grlplus.github.io/>, 2020. URL <https://arxiv.org/abs/2002.02406>

26. Md Rezaul Karim, Oya Beyan, Achille Zappa, Ivan G Costa, Dietrich Rebholz-Schuhmann, *Michael Cochez*, and Stefan Decker. Deep learning-based clustering approaches for bioinformatics. *Briefings in Bioinformatics*, 02 2020a. ISSN 1477-4054. doi: 10.1093/bib/bbz170. URL <https://doi.org/10.1093/bib/bbz170>. bbz170
27. Ruijie Wang, Meng Wang, Jun Liu, *Michael Cochez*, and Stefan Decker. Structured query construction via knowledge graph embedding. *Knowledge and Information Systems*, 62(5):1819–1846, May 2020. ISSN 0219-3116. doi: 10.1007/s10115-019-01401-x. URL <https://doi.org/10.1007/s10115-019-01401-x>
28. Md. Rezaul Karim, *Michael Cochez*, Joao Bosco Jares, Mamtaz Uddin, Oya Beyan, and Stefan Decker. Drug-drug interaction prediction based on knowledge graph embeddings and convolutional-LSTM network. In *Proceedings of the 10th ACM International Conference on Bioinformatics, Computational Biology and Health Informatics, BCB '19*, page 113–123, New York, NY, USA, 2019b. Association for Computing Machinery. ISBN 9781450366663. doi: 10.1145/3307339.3342161. URL <https://doi.org/10.1145/3307339.3342161>
29. Md. Rezaul Karim, Bharathi Raja Chakravarthi, John P. McCrae, and *Michael Cochez*. Classification benchmarks for under-resourced bengali language based on multichannel convolutifonal-lstm network. In *2020 IEEE 7th International Conference on Data Science and Advanced Analytics (DSAA)*, pages 390–399, 2020c. doi: 10.1109/DSAA49011.2020.00053. URL <https://arxiv.org/abs/2004.07807>
30. Md. Rezaul Karim, *Michael Cochez*, Oya Beyan, Stefan Decker, and Christoph Lange. OncoNetExplainer: Explainable predictions of cancer types based on gene expression data. In *2019 IEEE 19th International Conference on Bioinformatics and Bioengineering (BIBE)*, pages 415–422, 2019a. doi: 10.1109/BIBE.2019.00081
31. Svitlana Vakulenko, Javier David Fernandez Garcia, Axel Polleres, Maarten de Rijke, and *Michael Cochez*. Message passing for complex question answering over knowledge graphs. In *Proceedings of the 28th ACM International Conference on Information and Knowledge Management, CIKM '19*, page 1431–1440, New York, NY, USA, 2019. Association for Computing Machinery. ISBN 9781450369763. doi: 10.1145/3357384.3358026. URL <https://doi.org/10.1145/3357384.3358026>
32. Andrei Ionita, André Pomp, *Michael Cochez*, Tobias Meisen, and Stefan Decker. Transferring knowledge from monitored to unmonitored areas for forecasting parking spaces. *International Journal on Artificial Intelligence Tools - World Scientific*, 28(06):1960003, 2019. URL <https://arxiv.org/pdf/1908.03629.pdf>
33. Ruijie Wang, Meng Wang, Jun Liu, Weitong Chen, *Michael Cochez*, and Stefan Decker. Leveraging knowledge graph embeddings for natural language question answering. In Guoliang Li, Jun Yang, Joao Gama, Jugapong Natwichai, and Yongxin Tong, editors, *Database Systems for Ad-*

- vanced Applications*, pages 659–675, Cham, 2019. Springer International Publishing. ISBN 978-3-030-18576-3
34. Michael Cochez, Martina Garofalo, Jérôme Lenßen, and Maria Angela Pellegrino. A first experiment on including text literals in kglove. *arXiv preprint submitted*, 2018b. URL <https://www.cochez.nl/papers/literalsForEmbeddings.pdf>. Accepted for presentation at the 4th Workshop on Semantic Deep Learning (SemDeep-4)
  35. Svitlana Vakulenko, Maarten de Rijke, Michael Cochez, Vadim Savenkov, and Axel Polleres. Measuring semantic coherence of a conversation. In Denny Vrandečić, Kalina Bontcheva, and others, editors, *The Semantic Web - ISWC 2018 - 17th International Semantic Web Conference, Monterey, CA, USA, October 8-12, 2018, Proceedings, Part I*, volume 11136 of *Lecture Notes in Computer Science*, pages 634–651. Springer, 2018. URL [https://www.cochez.nl/papers/semantic\\_coherence.pdf](https://www.cochez.nl/papers/semantic_coherence.pdf)
  36. Andrei Ionita, André Pomp, Michael Cochez, Tobias Meisen, and Stefan Decker. Where to park?: Predicting free parking spots in unmonitored city areas. In *Proceedings of the 8th International Conference on Web Intelligence, Mining and Semantics*, WIMS '18, pages 22:1–22:12, New York, NY, USA, 2018. ACM. ISBN 978-1-4503-5489-9. doi: 10.1145/3227609.3227648. URL [https://www.cochez.nl/papers/parking\\_paper.pdf](https://www.cochez.nl/papers/parking_paper.pdf)
  37. Md Rezaul Karim, Michael Cochez, Oya Deniz Beyan, Chowdhury Farhan Ahmed, and Stefan Decker. Mining maximal frequent patterns in transactional databases and dynamic data streams: A Spark-based approach. *Information Sciences*, 432:278–300, 2018
  38. Md. Rezaul Karim, Matthias Heinrichs, Lars C. Gleim, Michael Cochez, and others. Towards a FAIR sharing of scientific experiments: Improving discoverability and reusability of dielectric measurements of biological tissues. In *SWAT4HCLS*, 2017. URL [http://www.swat4ls.org/wp-content/uploads/2017/11/SWAT4LS-2017\\_paper\\_11.pdf](http://www.swat4ls.org/wp-content/uploads/2017/11/SWAT4LS-2017_paper_11.pdf)
  39. Michael Cochez, Petar Ristoski, Simone Paolo Ponzetto, and Heiko Paulheim. Global RDF vector space embeddings. In Claudia d’Amato, Miriam Fernandez, and others, editors, *The Semantic Web – ISWC 2017: 16th International Semantic Web Conference, Vienna, Austria, October 21–25, 2017, Proceedings, Part I*, pages 190–207. Springer International Publishing, Cham, 2017d. ISBN 978-3-319-68288-4. doi: 10.1007/978-3-319-68288-4\_12. URL <https://www.cochez.nl/papers/GlobalRDFEmbedding.pdf>
  40. Michael Cochez, Dominik Hüser, and Stefan Decker. The future of the semantic web: Prototypes on a global distributed filesystem. In *2017 IEEE 37th International Conference on Distributed Computing Systems (ICDCS)*, pages 1997–2006, June 2017a. doi: 10.1109/ICDCS.2017.270
  41. Michael Cochez, Petar Ristoski, Simone Paolo Ponzetto, and Heiko Paulheim. Biased graph walks for RDF graph embeddings. In *Proceedings of the 7th International Conference on Web Intelligence, Mining and Semantics*, WIMS '17, pages 21:1–21:12, New York, NY, USA, 2017c. ACM.

- ISBN 978-1-4503-5225-3. doi: 10.1145/3102254.3102279. URL <https://www.cochez.nl/papers/biasedGraphWalks.pdf>
42. *Michael Cochez*, Jacques Periaux, Vagan Terziyan, and Tero Tuovinen. Agile deep learning uavs operating in smart spaces: Collective intelligence versus “mission-impossible”. In Pedro Diez, Pekka Neittaanmäki, Jacques Periaux, Tero Tuovinen, and Olli Bräysy, editors, *Computational Methods and Models for Transport: New Challenges for the Greening of Transport Systems*, pages 31–53. Springer International Publishing, Cham, 2018c. ISBN 978-3-319-54490-8. doi: 10.1007/978-3-319-54490-8\_3. URL [https://doi.org/10.1007/978-3-319-54490-8\\_3](https://doi.org/10.1007/978-3-319-54490-8_3). first online 2017
  43. *Michael Cochez*, Vagan Terziyan, and Vadim Ermolayev. Large scale knowledge matching with balanced efficiency-effectiveness using LSH forest. In Ngoc Thanh Nguyen, Ryszard Kowalczyk, Alexandre Miguel Pinto, and Jorge Cardoso, editors, *Transactions on Computational Collective Intelligence XXVI*, pages 46–66. Springer International Publishing, Cham, 2017e. ISBN 978-3-319-59268-8. doi: 10.1007/978-3-319-59268-8\_3. URL <https://www.cochez.nl/papers/KnowledgeMatchingLSHForest.pdf>
  44. Vagan Terziyan, Mariia Golovianko, and *Michael Cochez*. Tb-structure: Collective intelligence for exploratory keyword search. In *Semantic Keyword-Based Search on Structured Data Sources: COST Action IC1302 Second International KEYSTONE Conference, IKC 2016, Cluj-Napoca, Romania, September 8–9, 2016, Revised Selected Papers*, pages 171–178. Springer International Publishing, Cham, 2017. ISBN 978-3-319-53640-8. doi: 10.1007/978-3-319-53640-8\_15. URL <https://www.cochez.nl/papers/IKC-2016.pdf>
  45. Bushra Zafar, *Michael Cochez*, and Usman Qamar. Using distributional semantics for automatic taxonomy induction. In *2016 International Conference on Frontiers of Information Technology (FIT)*, pages 348–353, Dec 2016. doi: 10.1109/FIT.2016.070. URL <https://www.cochez.nl/papers/distributional-semantics-taxonomy.pdf>
  46. *Michael Cochez*, Stefan Decker, and Eric Prud’hommeaux. Knowledge representation on the web revisited: The case for prototypes. In *The Semantic Web – ISWC 2016: 15th International Semantic Web Conference, Kobe, Japan, October 17–21, 2016, Proceedings, Part I*, pages 151–166. Springer International Publishing, Cham, 2016a. ISBN 978-3-319-46523-4. doi: 10.1007/978-3-319-46523-4\_10. URL <https://www.cochez.nl/papers/knowledge-representation-prototypes.pdf>
  47. *Michael Cochez* and Ferrante Neri. Scalable hierarchical clustering: Twister tries with a posteriori trie elimination. In *Computational Intelligence, 2015 IEEE Symposium Series on*, pages 756–763. IEEE, Dec 2015. doi: 10.1109/SSCI.2015.12. URL [https://www.cochez.nl/papers/TT\\_aposteriori\\_elimination.pdf](https://www.cochez.nl/papers/TT_aposteriori_elimination.pdf)
  48. *Michael Cochez*, Vagan Terziyan, and Vadim Ermolayev. Balanced large scale knowledge matching using LSH forest. In Jorge Cardoso, Francesco Guerra, Geert-Jan Houben, Miguel Alexandre Pinto, and Yannis Velegrakis, editors, *Semantic Keyword-based Search on Structured Data Sources:*



- First COST Action IC1302 International KEYSTONE Conference, IKC 2015, Coimbra, Portugal, September 8-9, 2015. Revised Selected Papers*, volume 9398 of *Lecture Notes in Computer Science*, pages 36–50. Springer International Publishing, 2015. ISBN 978-3-319-27932-9. doi: 10.1007/978-3-319-27932-9\_4. URL [https://www.cochez.nl/papers/balanced\\_knowledge\\_matching.pdf](https://www.cochez.nl/papers/balanced_knowledge_matching.pdf)
49. Michael Cochez and Hao Mou. Twister tries: Approximate hierarchical agglomerative clustering for average distance in linear time. In *Proceedings of the 2015 ACM SIGMOD international conference on Management of data, SIGMOD '15*, New York, NY, USA, 2015a. ACM. doi: 10.1145/2723372.2751521. URL [https://www.cochez.nl/papers/twister\\_tries.pdf](https://www.cochez.nl/papers/twister_tries.pdf)
  50. Sergey Chernov, Michael Cochez, and Tapani Ristaniemi. Anomaly detection algorithms for the sleeping cell detection in LTE networks. In *Vehicular Technology Conference (VTC Spring), 2015 IEEE 81st*, pages 1–5. IEEE, 2015. URL [https://www.cochez.nl/papers/anomaly\\_sleeping\\_cell.pdf](https://www.cochez.nl/papers/anomaly_sleeping_cell.pdf)
  51. Horacio Paggi and Michael Cochez. Indeterminacy reduction in agent communication using a semantic language. *WSEAS TRANSACTIONS on SYSTEMS*, 14:77–89, 2015. URL [https://www.cochez.nl/papers/indeterminacy2015pagi\\_preprint.pdf](https://www.cochez.nl/papers/indeterminacy2015pagi_preprint.pdf)
  52. Horacio Paggi and Michael Cochez. Use of a semantic language to reduce the indeterminacy in agents communication. In *Mathematics and Computers in Sciences and in Industry (MCSI), 2014 International Conference on*, pages 281–287. IEEE, 2014. URL [https://www.cochez.nl/papers/indeterminacy2014pagi\\_preprint.pdf](https://www.cochez.nl/papers/indeterminacy2014pagi_preprint.pdf)
  53. Ville Isomöttönen and Michael Cochez. Challenges and confusions in learning version control with git. In Vadim Ermolayev, Heinrich C. Mayr, Mykola Nikitchenko, Aleksander Spivakovsky, and Grygoriy Zholtkevych, editors, *10th International Conference, ICTERI 2014, Kherson, Ukraine, June 9-12, 2013, Revised Selected Papers*, pages 178–193, Cham, 2014. Springer International Publishing. ISBN 978-3-319-13206-8. doi: 10.1007/978-3-319-13206-8\_9. URL [http://dx.doi.org/10.1007/978-3-319-13206-8\\_9](http://dx.doi.org/10.1007/978-3-319-13206-8_9)
  54. Michael Cochez. Locality-sensitive hashing for massive string-based ontology matching. In *Web Intelligence (WI) and Intelligent Agent Technologies (IAT), 2014 IEEE/WIC/ACM International Joint Conferences on*, volume 1, pages 134–140. IEEE, 2014. URL [https://www.cochez.nl/papers/LSH\\_ontology\\_matching.pdf](https://www.cochez.nl/papers/LSH_ontology_matching.pdf)
  55. Vadim Ermolayev, Rajendra Akerkar, Vagan Terziyan, and Michael Cochez. Towards evolving knowledge ecosystems for big data understanding. In Rajendra Akerkar, editor, *Big Data Computing*, pages 3–55. Taylor & Francis group - Chapman and Hall/CRC, 2014. ISBN 978-1-46-657837-1. Preprint part of my doctoral dissertation

56. Ville Isomöttönen, Ville Tirronen, and *Michael Cochez*. Issues with a course that emphasizes self-direction. In *Proceedings of the 18th ACM Conference on Innovation and Technology in Computer Science Education*, ITiCSE '13, pages 111–116, New York, NY, USA, 2013. ACM. ISBN 978-1-4503-2078-8. doi: 10.1145/2462476.2462495. URL <http://doi.acm.org/10.1145/2462476.2462495>
57. *Michael Cochez*, Ville Isomöttönen, Ville Tirronen, and Jonne Itkonen. How do computer science students use distributed version control systems? In Vadim Ermolayev, Heinrich C. Mayr, Mykola Nikitchenko, Aleksander Spivakovsky, and Grygoriy Zholtkevych, editors, *9th International Conference, ICTERI 2013, Kherson, Ukraine, June 19-22, 2013, Revised Selected Papers*, pages 210–228, Cham, 2013b. Springer International Publishing. ISBN 978-3-319-03998-5. doi: 10.1007/978-3-319-03998-5\_11. URL [http://dx.doi.org/10.1007/978-3-319-03998-5\\_11](http://dx.doi.org/10.1007/978-3-319-03998-5_11)
58. *Michael Cochez*, Ville Isomöttönen, Ville Tirronen, and Jonne Itkonen. The use of distributed version control systems in advanced programming courses. In *ICTERI 2013 - ICT in Education, Research and Industrial Applications*, pages 221–235, Aachen, 2013c. CEUR Workshop Proceedings (1000). URL <http://ceur-ws.org/Vol-1000/ICTERI-2013-p-221-235.pdf>
59. *Michael Cochez*, Sami Helin, and Jiawen Chen. Cloud communication service. In Ivan Porres, Tommi Mikkonen, and Adnan Ashraf, editors, *Developing cloud software : algorithms, applications, and tools*. TUCS Turku Center for Computer Science, general publication series, 10 2013a. URL <http://urn.fi/URN:ISBN:978-952-12-2952-7>
60. *Michael Cochez* and Vagan Terziyan. Quality of an ontology as a dynamic optimisation problem. In V. Ermolayev et. al, editor, *ICTERI 2012 - ICT in Education, Research and Industrial Applications*, pages 249–256, Aachen, 2012. CEUR Workshop Proceedings (848). URL <http://ceur-ws.org/Vol-848/ICTERI-2012-CEUR-WS-DEIS-paper-1-p-249-256.pdf>
61. Oleksiy Khriyenko and *Michael Cochez*. Open environment for collaborative cloud ecosystems. In *CLOUD COMPUTING 2011, The Second International Conference on Cloud Computing, GRIDs, and Virtualization*, pages 147–153, 2011. URL <https://www.cochez.nl/papers/OECCE-2011.pdf>

## Proceedings Editor

1. Jie Tang, Michalis Vazirgiannis, Yuxiao Dong, Fragkiskos D. Malliaros, *Michael Cochez*, Mayank Kejriwal, and Achim Rettinger. Bignet 2018 chairs' welcome & organization. In *Companion Proceedings of the The Web Conference 2018, WWW '18*, page 943–944, Republic and Canton of Geneva, CHE, 2018. International World Wide Web Conferences Steering Committee. ISBN 9781450356404. doi: 10.1145/3184558.3192293. URL <https://doi.org/10.1145/3184558.3192293>



2. *Michael Cochez*, Thierry Declerck, Gerard de Melo, Luis Espinosa Anke, Besnik Fetahu, Dagmar Gromann, Mayank Kejriwal, Maria Koutraki, Freddy Lécué, Enrico Palumbo, and Harald Sack, editors. *Proceedings of the First Workshop on Deep Learning for Knowledge Graphs and Semantic Technologies (DL4KGS) co-located with the 15th Extended Semantic Web Conference (ESWC 2018)*, number 2106 in CEUR, 2018a. CEUR. URL <http://ceur-ws.org/Vol-2106/>
3. Piero Andrea Bonatti, Stefan Decker, Axel Polleres, and Valentina Presutti. Knowledge Graphs: New Directions for Knowledge Representation on the Semantic Web (Dagstuhl Seminar 18371). *Dagstuhl Reports*, 8(9): 29–111, 2019. ISSN 2192-5283. doi: 10.4230/DagRep.8.9.29. URL <http://drops.dagstuhl.de/opus/volltexte/2019/10328>. I was an additional organizer and editor as acknowledged on the first page of the report
4. Mehwish Alam, Davide Buscaldi, *Michael Cochez*, Francesco Osborne, Diego Reforgiato Recupero, and Harald Sack. Proceedings of the workshop on deep learning for knowledge graphs (DL4KG2019) co-located with the 16th extended semantic web conference 2019 (ESWC 2019), 2019. URL <http://ceur-ws.org/Vol-2377/>
5. Mehwish Alam, Davide Buscaldi, *Michael Cochez*, Francesco Osborne, Diego Reforgiato Recupero, and Harald Sack. Proceedings of the workshop on deep learning for knowledge graphs (DL4KG2020) co-located with the 17th extended semantic web conference 2020 (ESWC 2020), 2020. URL <http://ceur-ws.org/Vol-2635/>
6. Andreas Harth, Valentina Presutti, Raphaël Troncy, Maribel Acosta, Axel Polleres, Javier D Fernández, Josiane Xavier Parreira, Olaf Hartig, Katja Hose, and *Michael Cochez*, editors. *The Semantic Web: ESWC 2020 Satellite Events*, number 12124 in LNCS, 2020b. Springer. URL <https://www.springer.com/gp/book/9783030623265>
7. Andreas Harth, Sabrina Kirrane, Axel-Cyrille Ngonga Ngomo, Heiko Paulheim, Anisa Rula, Anna Lisa Gentile, Peter Haase, and *Michael Cochez*, editors. *The Semantic Web: 17th International Conference, ESWC 2020, Heraklion*, number 12123 in LNCS, 2020a. Springer. URL <https://www.springer.com/gp/book/9783030494605>

## Technical reports, documentation and articles (non-reviewed)

1. Dimitrios Alivanistos, Selene Báez Santamaría, *Michael Cochez*, Jan-Christoph Kalo, Emile van Krieken, and Thiviyan Thanapalasingam. Prompting as probing: Using language models for knowledge base construction, 2022b. URL <https://arxiv.org/abs/2208.11057>. **Winner of the LM-KBC competition of ISWC2022**
2. Martina Garofalo, Maria Angela Pellegrino, Abdulrahman Altabba, and *Michael Cochez*. Leveraging knowledge graph embedding techniques for industry 4.0 use cases. *Cyber Defence in Industry 4.0 Systems and Related*

- Logistics and IT Infrastructures – IOS Press*, 51:10, 2018. URL <https://arxiv.org/abs/1808.00434>
3. *Michael Cochez*, Naila Karim, and Iraklis Dimitriadis. Analysis of the DCAT-AP extensions. Study for the ISA<sup>2</sup> programme, European Commission, 2017b. URL <https://joinup.ec.europa.eu/document/analysis-dcat-ap-extensions>. This study was prepared for the ISA<sup>2</sup> Programme by: PwC EU Services
  4. *Michael Cochez*, Stefan Decker, and Eric Gordon Prud’hommeaux. Knowledge representation on the web revisited: Tools for prototype based ontologies. In *arXiv*, 2016b. URL <https://arxiv.org/abs/1607.04809>. arXiv:1607.04809 [cs.AI]
  5. *Michael Cochez*, Jacques Periaux, Vagan Terziyan, Kyryl Kamlyk, and Tero Tuovinen. Evolutionary cloud for cooperative UAV coordination. *Reports of the Department of Mathematical Information Technology, Series C. Software and Computational Engineering, No. C, 1*, 2014. URL <https://jyx.jyu.fi/dspace/handle/123456789/44629>
  6. *Michael Cochez* and Michal Nagy. Ubiware application user guide. Technical report, Industrial Ontologies Group, University of Jyväskylä, 2012a. UBIWARE documentation [[link](#)]
  7. Katasonov Arthem, *Michael Cochez*, and Michal Nagy. Ubiware application developer guide. Technical report, Industrial Ontologies Group, University of Jyväskylä, 2012. UBIWARE documentation [[link](#)]
  8. Katasonov Arthem and *Michael Cochez*. Ubiware platform application developer’s guide – rab overview. Technical report, Industrial Ontologies Group, University of Jyväskylä, 2012. UBIWARE documentation [[link](#)]
  9. *Michael Cochez*. Ubiware platform application developer’s guide – rab programming. Technical report, Industrial Ontologies Group, University of Jyväskylä, 2012b. UBIWARE documentation [[link](#)]
  10. *Michael Cochez* and Michal Nagy. Ubiware infrastructure guide. Technical report, Industrial Ontologies Group, University of Jyväskylä, 2012b. UBIWARE documentation [[link](#)]
  11. *Michael Cochez* and Michal Nagy. WP1: Mashupper – agent-enabled social cloud. Technical report, Tieto- ja viestintäteollisuuden tutkimus TIVIT Oy, 2011. Cloud Software Program Report, Q1-Q2/2011
  12. Vagan Terziyan, Sergiy Nikitin, Michal Nagy, Oleksiy Khriyenko, Joonas Kesäniemi, *Michael Cochez*, and Atte Pulkkis. Ubiware platform prototype v 3.0. Technical report (deliverable d3.3), Agora Centre, University of Jyväskylä, 2010b. UBIWARE Tekes Project [[link](#)]

## Master Thesis and Dissertation

1. *Michael Cochez*. Taming big knowledge evolution. Doctoral dissertation, University of Jyväskylä, May 2016. URL <http://urn.fi/URN:ISBN:978-951-39-6649-2>. Jyväskylä studies in computing 237

2. *Michael Cochez*. Semantic agent programming language: use and formalization. Master’s thesis, University of Jyväskylä, 2012a

## Posters

1. Maria Angela Pellegrino, *Michael Cochez*, Martina Garofalo, and Petar Ristoski. A configurable evaluation framework for node embedding techniques. In Pascal Hitzler, Sabrina Kirrane, Olaf Hartig, Victor de Boer, Maria-Esther Vidal, Maria Maleshkova, Stefan Schlobach, Karl Hammar, Nelia Lasier, Steffen Stadtmüller, Katja Hose, and Ruben Verborgh, editors, *The Semantic Web: ESWC 2019 Satellite Events*, pages 156–160, Cham, 2019. Springer International Publishing. ISBN 978-3-030-32327-1
2. Sophie Hallstedt, Nikita Makarov, Hossein Samieadel, Maria Pellegrino, Martina Garofalo, and *Michael Cochez*. Strategies to connect RDF graphs for link prediction using drug-disease knowledge graphs, 12 2018. URL <https://doi.org/10.6084/m9.figshare.7429094.v1>. Poster presented at the 11th International Conference Semantic Web Applications and Tools for Life Sciences (SWAT4HCLS 2018)
3. Kendra Oudyk and *Michael Cochez*. Birdsong query-by-humming using asymmetric set inclusion of pitch-curve segments, Feb 2018. Poster presented at the Cologne Spring School: Language, Music, and Cognition: Organizing Events in Time
4. *Michael Cochez* and Hao Mou. Twister tries: Approximate hierarchical agglomerative clustering for average distance in linear time, June 2015b. Poster presented in addition to oral presentation at SIGMOD 2015. See also the article in the conference proceedings
5. Sami Helin, Ville Loppinen, Anton Kupias, *Michael Cochez*, and Michal Nagy. Multi-channel communication framework, Dec 2012. Poster presented at the Cloud software program review meeting Q4/2012
6. Vagan Terziyan, Sergiy Nikitin, *Michael Cochez*, Michal Nagy, and Joonas Kesäniemi. Smart social phonebook, May 2010a. Poster presented at the Cloud software program review meeting Q3/2010

## Demos

1. Johannes Lipp, Lars Gleim, *Michael Cochez*, Iraklis Dimitriadis, Hussain Ali, Daniel Hoppe Alvarez, Christoph Lange, and Stefan Decker. Towards easy vocabulary drafts with neologism 2.0. In Ruben Verborgh, Anastasia Dimou, Aidan Hogan, Claudia d’Amato, Ilaria Tiddi, Arne Bröring, Simon Mayer, Femke Ongena, Riccardo Tommasini, and Mehwish Alam, editors, *The Semantic Web: ESWC 2021 Satellite Events*, pages 21–26, Cham, 2021. Springer International Publishing. ISBN 978-3-030-80418-3. URL <https://openreview.net/forum?id=PoAI5Rr1UFj>