Nicolas Hubert , Ph.D. Candidate in Computer Science

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🌐 https://nicolas-hbt.github.io/

Education

2021 – 2024   🔖 **Ph.D. in Computer Science.** University of Lorraine, Nancy, France.
Thesis title: *From Semantic-aware to Semantic-driven Knowledge Graph Embeddings for Link Prediction* (Ph.D. defense expected in June 2024).
Advisors: Dr. Prof. Armelle Brun and Dr. Prof. Davy Monticolo.

         Visiting Ph.D. Researcher (4 months). University of Mannheim, Germany.
Advisor: Dr. Prof. Heiko Paulheim.
Joint Publication: *Schema First! Learn Versatile Knowledge Graph Embeddings by Capturing Semantics with MASCHInE*. In K-CAP 2023 - 12th International Conference on Knowledge Capture, Pensacola, Florida.

2016 – 2020   🔖 **M.Sc. in Applied Mathematics.** Centrale Nantes, Nantes, France.
Keywords: *Statistical inference, Machine Learning, Bayesian statistics, Probability.*

     🔖 **M.Sc. in Management-Engineering.** Audencia BS, Nantes, France.
Keywords: *Financial Markets, Corporate Finance, Supply Chain, Digital Marketing, IT.*

Employment History

2021 – 2024 (36 months)   🔖 **Ph.D. Candidate.** University of Lorraine, Nancy, France.
2021 – 2021 (6 months)   🔖 **Research Intern.** ERPI Laboratory, Nancy, France.
2020 – 2021 (5 months)   🔖 **Applied Research Intern.** Nokia Bell Labs, Paris, France.
2019 – 2019 (5 months)   🔖 **Machine Learning Engineer Intern.** Credit Suisse, Lausanne, Switzerland.
2018 – 2018 (2 months)   🔖 **Hedge Fund Analyst Intern.** Altervest Ltd, Montreal, Canada.
2017 – 2017 (3 months)   🔖 **Data Analyst Intern.** HedgeServ, Luxembourg, Luxembourg.

Research Publications

Journal Articles

1.   **Hubert, N.**, Monnin, P., Brun, A., & Monticolo, D. (2023a). Sem@K: Is my knowledge graph embedding model semantic-aware? *Semantic Web*. Retrieved from
🔗 https://www.semantic-web-journal.net/system/files/swj3508.pdf

International Conference Articles

1.   **Hubert, N.**, Paulheim, H., Monnin, P., Brun, A., & Monticolo, D. (2023). Schema First! Learn Versatile Knowledge Graph Embeddings by Capturing Semantics with MASCHInE. In *K-CAP 2023 - 12th International Conference on Knowledge Capture*, Pensacola, Florida, US. Retrieved from
🔗 https://arxiv.org/pdf/2306.03659.pdf

2.   **Hubert, N.**, Monnin, P., Brun, A., & Monticolo, D. (2023b). Enhancing knowledge graph embedding models with semantic-driven loss functions (under review). 🔗 doi:10.48550/arXiv.2303.00286

3   **Hubert**, **N.**, Monnin, P., d'Aquin, M., Brun, A., & Monticolo, D. (2023). Pygraft: Configurable generation of schemas and knowledge graphs at your fingertips (under review). 🔗 doi:10.48550/arXiv.2309.03685

4   **Hubert**, **N.**, Brun, A., & Monticolo, D. (2022a). New Ontology and Knowledge Graph for University Curriculum Recommendation. In *ISWC 2022 - The 21st International Semantic Web Conference*, Hangzhou / Virtual, China. Retrieved from
🔗 https://hal.archives-ouvertes.fr/hal-03768154v2/document

5   **Hubert**, **N.**, Monnin, P., Brun, A., & Monticolo, D. (2022b). New Strategies for Training Knowledge Graph Embeddings: the Recommendation Case. In *EKAW 2022 - 23rd International Conference on Knowledge Engineering and Knowledge Management*, Bolzano, Italy. **Best Paper Award**. Retrieved from
🔗 https://hal.inria.fr/hal-03722881v3/document

International Workshop Articles

1   **Hubert**, **N.**, Monnin, P., Brun, A., & Monticolo, D. (2022a). Knowledge Graph Embeddings for Link Prediction: Beware of Semantics! In *DL4KG@ISWC 2022: Workshop on Deep Learning for Knowledge Graphs, held as part of ISWC 2022: the 21st International Semantic Web Conference*, Virtual, China. Retrieved from 🔗 https://hal.archives-ouvertes.fr/hal-03787512/document

National Workshop Articles

1   **Hubert**, **N.**, Brun, A., & Monticolo, D. (2022b). Vers un système de recommandation explicable pour l'orientation scolaire. In *Workshop EXPLAIN'AI - EGC Blois 2022*, Blois, France. Retrieved from
🔗 https://hal.archives-ouvertes.fr/hal-03559471/document

Skills

Languages	🔖	Strong reading, writing and speaking competencies for English, French, and Spanish.
Coding	🔖	PYTHON, R, SPARK, JAVA, C/C++, SQL, SPARQL.
IT Tools	🔖	DOCKER, MYSQL, FLASK, MONGODB, ELASTICSEARCH, LaTeX.
Misc.	🔖	Academic research, teaching, tennis, running, swimming.