

Amandine Decker

PHD STUDENT · JOINT PHD IN COMPUTER SCIENCE AND COMPUTATIONAL LINGUISTICS AT UNIVERSITÉ DE LORRAINE, NANCY, FRANCE AND UNIVERSITY OF GOTHENBURG, SWEDEN

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EDUCATION

PhD in Computer Science / Computational Linguistics (joint degree)

UNIVERSITÉ DE LORRAINE, IDMC AND UNIVERSITY OF GOTHENBURG

- Thesis: 'Modelling topic-level interaction in pathological conversations'
- Supervisors: Maxime Amblard (Semagramme, LORIA), Ellen Breitholtz (CLASP, FloV)

2022-10 - present
Nancy, France and Gothenburg, Sweden

Master's degree in Natural Language Processing (with highest honours)

UNIVERSITÉ DE LORRAINE, IDMC

- Master thesis: 'Topic Shifts: Preserving Comprehension in Conversation'
- Supervisors: Maxime Amblard (Semagramme, LORIA), Ellen Breitholtz (CLASP, FloV)

2020 to 2022
Nancy, France

Bachelor's degree of Mathematics and Computer Science applied to Humanities, option Cognitive Science (with highest honours)

UNIVERSITÉ DE LORRAINE, IDMC

- Bachelor thesis: 'Precise annotations of pathological conversations'
- Supervisors: Manuel Rebuschi (AhP, Université de Lorraine) and Maxime Amblard (Semagramme, LORIA)

2019/2020
Nancy, France

Intensive two-year study course preparing for the national competitive entrance to the French engineering schools

LYCÉE HENRI POINCARÉ

2017 to 2019
Nancy, France

PROFESSIONAL EXPERIENCE

M2 Research Internship

CLASP, UNIVERSITY OF GOTHENBURG

Analysis of topic shifts in conversation and modelling in Type Theory with Records

2022-03 to 2022-08
Gothenburg, Sweden

M1 Research internship

SEMAGRAMME TEAM, LORIA

Analysis of topic shifts in conversation and modelling in SDRT

2021-07 to 2021-08
Nancy, France

Bachelor's Research internship

SEMAGRAMME TEAM, LORIA AND ARCHIVES HENRI POINCARÉ, UNIVERSITÉ DE LORRAINE

Analysis of pathological conversations and annotations in SDRT

2020-05 to 2020-07
Nancy, France

TEACHING EXPERIENCE

MASTER'S LEVEL, NLP DEGREE · IDMC, UNIVERSITÉ DE LORRAINE (TAUGHT IN ENGLISH)

M1 - Introduction to \LaTeX and Bash - 6h, creation of the supports

2022/2023

M1 - Data Structures - 5h lectures + 10h practical sessions, creation of the supports

2023/2024

M1 - Introduction to Natural Language Processing - 8h practical sessions, creation of some of the supports

2024/2025 to 2025/2026

M1 - Cross-disciplinary project - 6h + Defenses, teaching assistant

2024/2025 to 2025/2026

M2 - Formal grammars and syntactic formalisms - 10h, teaching assistant

2022/2023 to 2025/2026

M2 - Formal methods for semantics and discourse - 10h, teaching assistant

2024/2025 to 2025/2026

M2 - Dialogue, ChatBot and Question Answering - 7h, teaching assistant

2024/2025

M2 - Dialogue Engineering - 7h lectures + 7h practical sessions, creation of the supports

2024/2025 to 2025/2026

BACHELOR'S LEVEL, MIASHS DEGREE · IDMC, UNIVERSITÉ DE LORRAINE (TAUGHT IN FRENCH)

L1 - Introduction to algorithmic and Java programming - 18h, teaching assistant

2024/2025

BACHELOR'S LEVEL, COMPUTATIONAL LINGUISTICS DEGREE · UNIVERSITY OF GOTHENBURG (TAUGHT IN ENGLISH)

Introduction to data collection and ELAN tool - 10h, creation of the supports

2023/2024

PUBLICATIONS

INTERNATIONAL CONFERENCE PROCEEDINGS

DECKER, A., AMBLARD, M., & BREITHOLTZ, E. 'Off the Hamster Wheel: Rethinking Dialogue Research through a Meta-Analysis of the ACL Anthology 2024'. In: *Language Resources and Evaluation Conference (LREC) 2026*. ELRA Language Resources Association. Palma De Mallorca, Espagne, 2026, May.

MARQUER, E., ALSAIDI, S., **DECKER, A.**, MURENA, P., & COUCEIRO, M. 'A deep learning approach to solving morphological analogies' (M. T. KEANE & N. WIRATUNGA, Eds.). In: *Case-based reasoning research and development - 30th international conference, ICCBR 2022* (M. T. KEANE & N. WIRATUNGA, Eds.). Ed. by KEANE, M. T., & WIRATUNGA, N. 13405. Lecture Notes in Computer Science. Springer, 2022, 159–174.

ALSAIDI, S., **DECKER, A.**, LAY, P., MARQUER, E., MURENA, P.-A., & COUCEIRO, M. 'A Neural Approach for Detecting Morphological Analogies'. In: *DSAA 2021 - 8th IEEE International Conference on Data Science and Advanced Analytics*. Porto/Online, Portugal, 2021, October, 1–10.

NATIONAL CONFERENCE PROCEEDINGS

DECKER, A., & AMBLARD, M. « Construction d'une mesure de similarité thématique non supervisée pour les conversations » (M. BALAGUER, N. BENDAHMAN, L.-M. HO-DAC, J. MAUCLAIR, J. G MORENO & J. PINQUIER, Éd.). fra. In: *Actes de la 31ème Conférence sur le Traitement Automatique des Langues Naturelles, volume 1 : articles longs et prises de position* (M. BALAGUER, N. BENDAHMAN, L.-M. HO-DAC, J. MAUCLAIR, J. G MORENO & J. PINQUIER, Éd.). Sous la dir. de BALAGUER, M., BENDAHMAN, N., HO-DAC, L.-M., MAUCLAIR, J., G MORENO, J., & PINQUIER, J. Toulouse, France : ATALA; AFPC, 2024, juillet, 362-375.

INTERNATIONAL WORKSHOP PRESENTATIONS

DECKER, A., AMBLARD, M., & BREITHOLTZ, E. 'Mapping the Landscape of Dialogue Research: A Meta-Analysis of ACL Anthology 2024'. In: *Proceedings of the 29th Workshop on the Semantics and Pragmatics of Dialogue – Poster Abstracts*. Bielefeld, Germany, 2025, September, 255–257.

DECKER, A., & AMBLARD, M. 'With a Little Help from my (Linguistic) Friends: Topic Segmentation of Multi-party Casual Conversations' (M. STRUBE, C. BRAUD, C. HARDMEIER, J. J. LI, S. LOAICIGA, A. ZELDES, & C. LI, Eds.). In: *Proceedings of the 5th Workshop on Computational Approaches to Discourse (CODI 2024)* (M. STRUBE, C. BRAUD, C. HARDMEIER, J. J. LI, S. LOAICIGA, A. ZELDES, & C. LI, Eds.). Ed. by STRUBE, M., BRAUD, C., HARDMEIER, C., LI, J. J., LOAICIGA, S., ZELDES, A., & LI, C. Malta, Malta: Association for Computational Linguistics, 2024, March, 177–188.

DECKER, A., TOURNEUR, V., AMBLARD, M., & BREITHOLTZ, E. "'Wait, did you mean the doctor?": Collecting a Dialogue Corpus for Topical Analysis'. In: *Proceedings of the 28th Workshop on the Semantics and Pragmatics of Dialogue*. Rovereto, Italy, 2024, September.

DECKER, A., BREITHOLTZ, E., HOWES, C., & LARSSON, S. 'Topic and genre in dialogue'. In: *Proceedings of the 27th Workshop on the Semantics and Pragmatics of Dialogue*. Maribor, Slovenia, 2023, August, 143–145.

DECKER, A., AMBLARD, M., & BREITHOLTZ, E. (2022, June). 'Modelling topics and topic shifts in dialogue' [Extended Abstract presented at the workshop Semantics, Memory, and Emotion II in September 2022.].

ALSAIDI, S., **DECKER, A.**, LAY, P., MARQUER, E., MURENA, P.-A., & COUCEIRO, M. 'On the Transferability of Neural Models of Morphological Analogies'. In: *AIMLAI, ECML PKDD 2021: European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases*. 1524. Communications in Computer and Information Science. Bilbao/Virtual, Spain: Springer, 2021, 76–89.

NATIONAL WORKSHOP PRESENTATIONS

DECKER, A., & AMBLARD, M. « **L'essentiel est invisible pour les représentations sémantiques** » (M. AMBLARD, M. BORITCHEV, B. GUILLAUME, J. HEINECKE & F. HERLEDAN, Éd.). In : *Actes de l'atelier Avancement de l'AMR et de l'Analyse Sémantique 2025 (4AS)* (M. AMBLARD, M. BORITCHEV, B. GUILLAUME, J. HEINECKE & F. HERLEDAN, Éd.). Sous la dir. d'AMBLARD, M., BORITCHEV, M., GUILLAUME, B., HEINECKE, J., & HERLEDAN, F. Marseille, France : ATALA & ARIA, 2025, 1-8.

DECKER, A., AMBLARD, M., & BREITHOLTZ, E. 'Analysing topic shifts in task-oriented dialogues'. In: In *Journées scientifiques du GDR Lift - LIFT 2023*. Nancy, France, 2023, November.

SCIENTIFIC OUTREACH MATERIAL

CHOI, H.-S., **DECKER, A.**, RICHARD, V. D., & COUSIN, M. « **PENSE M'EN** ». In : In *THINK BEFORE LOADING*. 2024.

MENTORING

Inès Hernandez, Master's year-long research project · IDMC, UNIVERSITÉ DE LORRAINE 2023/2024
Training a topic similarity metrics on Reddit conversations.

Emeric Licorni, Bachelor's internship · IDMC, UNIVERSITÉ DE LORRAINE 2023/2024
Collection and analysis of textual conversational data.

Axel Felten, Hao Meng, Jinane Harchal, and Mario Jakimoski, Master's research project · IDMC, UNIVERSITÉ DE LORRAINE 2025/2026
Extracting topical information from real-life conversations based on potential questions

SCIENTIFIC OUTREACH

'Sciences: a Women's job' Day 2026-03-19
2nd edition in Grand Est, Nancy, France
Embassador · Participation to speed meetings with high school female students about research and career paths in science.

AI Day Workshop 2026-03-09
ENSAD, Nancy, France
Workshop for students and staff of an art school about AI. I presented a video game I created in relation to my research, discussed the complexity of dialogue through a short hand-on activity and finished with a Q&A session about my research and about AI in general.

Women Heritage Week-End 2024-09-21 to 2024-09-22
Féru des Sciences, Nancy, France
Outreach workshop to present my research work, short hands-on activity to demonstrate the complexity and multi-modality of dialogue. Open to the public.

'Women & Engineers Day' – Succeeding in Science and Technology 2025-02-07
Lycée Fabert, Metz, France
Round table discussion with female researchers and/or engineers aimed at last-year high school female students followed by speed-meetings.

MATH.en.JEANS Workshop two editions: 2023/2024 and 2024/2025
Collège Edmont de Goncourt, Pulnoy, France
Year-long workshop for secondary school students to introduce them to research in computer science and mathematics. I produced three research subjects embedded in stories together with Marie Cousin. We then helped small groups of students explore these subjects before they presented their work to other groups from Grand Est, Luxembourg and Belgium in a seminar.

« Les Cigognes » mathematics and computer science research retreat 2024-10-24
Ramonchamp, Vosges, France
Speed-meetings with female high school students to present my research and discuss women in science in general.

'CHICHE! - 1 scientist, 1 classroom' talks

2022 to 2024

Several high schools in Grand Est, France

Talks to first-year high school students about research - in particular in computer science, about the daily life of a PhD student, about my own research, and about higher education paths in general. Short unplugged computer science activity and Q&A session.

- 4 classes - Lycée Antoine de Saint-Exupéry, Fameck (France) November 2022
- 6 classes - Lycée Cormontaigne, Metz (France) February 2023
- 9 classes - Lycée J.V. Poncelet, Saint-Avold (France) March 2023
- 6 classes - Lycée J.V. Poncelet, Saint-Avold (France) January 2024

OTHER ACTIVITIES

SCIENTIFIC RESPONSIBILITIES

Member of the organisation comitee of the 15th edition of IWCS

2023-06-20 to 2023-06-23

Nancy, France

PEER REVIEW

Reviewer for RESOURCEFUL

2026

Reviewer for SemDial

2024 to 2025

Sub-reviewer for ECAI

2025

Sub-reviewer for TALN

2024

PRODUCTIONS RELATED TO MY RESEARCH

Scientific GameJam

2026-01-30 to 2026-01-31

Féru des Sciences, Nancy, France

Two days to develop a video game on a topic related to my research in a team of 7, including students from the Université de Lorraine. The final game was presented to the public at the end of the event.

Ethics in Computer Science Workshop – Write Your Dystopia

2022-11-03 to 2022-11-04

Château du Montet, Vandœuvre-lès-Nancy, France

Two days to write a dystopian story in a group of four PhD students related to ethical issues of our research fields. The final story OintMind is available in this compendium.

SKILLS

COMPUTER SKILLS

- **Programming languages:** Python, Java, OCaml, R, SQL, Bash, \LaTeX
- **Web development:** HTML, CSS, JavaScript, Flask
- **Tools:** Git, Jupyter, ELAN, Praat

LANGUAGES

- **French:** native
- **English:** fluent (C2) – TOEIC Listening and Reading 2021: 990/990
- **German:** rusty (B2-C1) – Abitur 2017: 1.0 (very good)
- **Swedish:** basic (A1)

INTERESTS

- **Reading:** I have a particular interest in fantasy and crime fiction;
- **Drawing/Painting:** One of my hobbies is drawing and painting and I have been personalising my own book edges for a few years;
- **Video games:** I enjoy playing roguelikes and narrative games;
- **Board games:** I like games with a strong interaction between players.