

Rachel Bawden

PhD Student in NLP – Machine Translation

Personal details

Name Rachel Alice Bawden
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Professional experience

Research

- 2015–present **PhD in Computer Science**, *LIMSI-CNRS, Univ. Paris-Sud, Université Paris-Saclay*, Machine translation of spontaneous dialogues. Supervised by Sophie Rosset and Thomas Lavergne.
- May–August 2017 **Research visit**, *ILCC, University of Edinburgh*, Multi-encoder neural machine translation to integrate linguistic context. Collaboration with Alexandra Birch, Barry Haddow and Rico Sennrich.
- February–August 2015 **Master’s research placement and thesis**, *Alpage (Inria & Université Paris-Diderot)*, A boosting approach to model selection for statistical syntactic parsing. Supervised by Benoit Crabbé.
- May–August 2014 **Master’s research placement**, *LaTTiCe (CNRS & Université Sorbonne Nouvelle) and Télécom ParisTech*, Modelling communicative acts for an embodied conversational agent. Supervised by Frédéric Landragin and Chloé Clavel.
- June–August 2013 **Master’s research placement**, *MoDyCo Laboratory (CNRS & Université Paris-Ouest)*, Development and semi-automatic correction of a dependency treebank of spoken French. Supervised by Sylvain Kahane.
- 2013 **Translation proof-reading and revision**, *Lucien Tesnière*, Elements of structural syntax, published in French in 1959, translated by Timothy Osborne and Sylvain Kahane, John Benjamins, Amsterdam, 2015.
- March–June 2013 **Research placement**, *MoDyCo Laboratory (CNRS & Université Paris-Ouest)*, Annotation of a treebank of spoken French for syntactic dependencies.

Teaching

- 2016–17, 2017–18 **Introduction to NLP (30hrs/year)**, *4th year*, Polytech Paris-Sud, Lectures, tutorials and practical classes.
- 2017–18 **Introduction to algorithmics and C++ (10hrs)**, *2nd year*, Polytech Paris-Sud, Practical classes.
- 2016–17 **Programming with C (27hrs)**, *3rd year*, Polytech Paris-Sud, Tutorials and classes.
- 2015–16, 2016–17 **Databases (24hrs/year)**, *3rd year*, Polytech Paris-Sud, Tutorials and classes.
- 2015–16 **Algorithmics/C (28hrs)**, *3rd year*, Polytech Paris-Sud, Tutorials and classes.
- 2015–16 **Tutoring in computer science (12hrs)**, *3rd year*, Polytech Paris-Sud.
- 2009–2010 **English language assistant**, *4 primary schools in Le Puy-en-Velay, France*.
- 2005 **Work placement as an English language assistant**, *Collège St Martin, Tours*.

Community activities

- 2018 **Programme committees**, ACL, EMNLP, NAACL (Student research workshop).
2017 **Programme committees**, LREC, ACL (Student research workshop).
2016 **Jury member of the Doctoral Prize**, *The Doctoral School of Science and Communication Technology (STIC)*, Université Paris-Saclay.
2016 **Co-organiser of the PhD Day**, *LIMSI, CNRS*.
2016–2017 **PhD representative for the laboratory board**, *LIMSI, CNRS*.

Education and degrees

- 2013–2015 **Master's degree in Computational Linguistics**, *Université Paris-Diderot*, First class ("mention très bien"). Machine learning, syntactic parsing, computational semantics, probabilities for NLP, machine translation, formal languages.
2012–2013 **Master's degree (first year) in Linguistic Engineering**, *Université Sorbonne Nouvelle*, First class ("mention très bien"). Corpus processing, formal grammars, lexicography, computational phonetics.
2007–2011 **Bachelor of Arts in French and Linguistics**, *Oxford University*, First Class. General linguistics, syntax, historical linguistics, sociolinguistics, French linguistics. Special subjects: phonetics/phonology, psycholinguistics.
2005–2007 **A-levels**, *The Latymer School, Edmonton, London*, French, English, Biology, Geography, four grade "A"s.

Additional training

- 50hrs Lisbon Machine Learning Summer School (LxMLS) 2016, Instituto Superior Técnico (IST), *Lisbon, Portugal*

Computer skills

- Languages **Python, C++**, Bash, C, Perl, Java, OCaml, Praat, SQL
Web technologies HTML, CSS, XML, XSL

Languages

- Native speaker English
Fluent French

Interests

- Piano Grade 8, 2006, Guildhall Exams
Saxophone alto Grade 8, 2005, Associated Board
Saxophone tenor Musician in the Orchestre d'harmonie de Pantin, with a dozen public concerts a year.

Publications

Journal Article

- [1] Rachel Bawden, Chloé Clavel, and Frédéric Landragin. Towards the generation of dialogue acts in socio-affective ECAs: a corpus-based prosodic analysis. *Language Resources and Evaluation*, 4(2):821–838, 2016. First online 31 July 2016.

Book Chapter

- [2] Sylvain Kahane, Kim Gerdes, and Rachel Bawden. The microsyntactic annotation. In *Rhapsodie – A Prosodic and Syntactic Treebank for Spoken French*, chapter 4. John Benjamins, Amsterdam, to appear.

Conference Papers

- [3] Rachel Bawden, Rico Sennrich, Alexandra Birch, and Barry Haddow. Evaluating Discourse Phenomena in Neural Machine Translation. In *Proceedings of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT-2018)*, New Orleans, USA, 2018.
- [4] Rachel Bawden, Thomas Lavergne, and Sophie Rosset. Detecting context-dependent sentences in parallel corpora. In *Proceedings of the 25th Conférence sur le Traitement Automatique des Langues Naturelles (TALN-2018)*, Rennes, France, 2018.
- [5] Rachel Bawden. Machine Translation, it's a question of style, innit? The case of English tag questions. In *Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing (EMNLP-2017)*, pages 2497–2502, Copenhagen, Denmark, 2017.
- [6] Rachel Bawden. Machine Translation of Speech-Like Texts: Strategies for the Inclusion of Context. In *Proceedings of the 19th REcontres jeunes Chercheurs en Informatique pour le TAL (RECITAL-2017)*, pages 1–14, Orléans, France, 2017.
- [7] Rachel Bawden and Benoît Crabbé. Boosting for Efficient Model Selection for Syntactic Parsing. In *Proceedings of the 26th International Conference on Computational Linguistics (COLING-2016)*, Osaka, Japan, 2016.
- [8] Rachel Bawden. Cross-lingual Pronoun Prediction with Linguistically Informed Features. In *Proceedings of the 1st Conference on Machine Translation (WMT-2016)*, Berlin, Germany, 2016.
- [9] Rachel Bawden, Guillaume Wisniewski, and Hélène Maynard. Investigating gender adaptation for speech translation. In *Proceedings of the 23rd Conférence sur le Traitement Automatique des Langues Naturelles (TALN-2016)*, Paris, France, 2016.
- [10] Rachel Bawden, Marie-Amélie Botalla, Kim Gerdes, and Sylvain Kahane. Correcting and Validating Syntactic Dependency in the Spoken French Treebank. In *Proceedings of the Ninth International Conference on Language Resources and Evaluation (LREC-2014)*, 2014.

Technical Report

- [11] Sylvain Kahane, Kim Gerdes, Pietrandrea Paola, Benoitoun Christophe, Rachel Bawden, Marie-Amélie Botalla, and Adèle Désoyer. *Protocole de codage microsyntactique*, 2013. Translated into English by Rachel Bawden under the title "Protocol for micro-syntactic coding".

Master's Thesis

- [12] Rachel Bawden. Boosting for model selection in syntactic parsing. Master's thesis, Inria (Alpage), Paris, France, 2015. Supervision by Benoît Crabbé.