Aina Garí Soler

Postdoctoral Researcher in Natural Language Processing

Experience

- Oct 2024 Postdoctoral Researcher, INRIA, Paris, France.
 - Sep 2025 Automatic analysis of alignment between speakers in conversations (SINNet ANR project) with Chloé Clavel and Matthieu Labeau.
- Sep 2021 **Postdoctoral Researcher**, *Télécom-Paris*, Palaiseau, France.
- Sep 2024 Word usage in interaction and word meaning negotiation, with Chloé Clavel and Matthieu Labeau.
- Mar 2017 Research Assistant, Pompeu Fabra University, Barcelona, Spain.
 - Nov 2017 Collaboration in the project "Language, Deixis and the Disordered Mind" (FFI2013-40526-P) performing statistical analyses.
- Dec 2015 Student Assistant, Saarland University, Saarbrücken, Germany.
 - Aug 2016 Collaboration in the project "Information Density and Linguistic Encoding" (C1) correcting the automatic segmentation of recordings into speech sounds with Praat.
- Oct 2014 Corpus Annotator, University of Barcelona, Barcelona, Spain.
 - Jun 2015 Manual syntactic annotation of a corpus of Mexican Spanish.
- Oct 2012 **Student Assistant**, University Institute of Applied Linguistics (Pompeu Fabra Jun 2013 University), Barcelona, Spain.

 Internship in the Neologisms, NLP and Forensic Linguistics departments.

Education

Nov 2017 – **PhD in Computer Science**, *Université Paris Saclay, LISN (former LIMSI), CNRS*, Jun 2021 Orsay, France.

PhD student in Multilingual Semantic Processing in the MULTISEM ANR project (ANR-16-CE33-0013). **Thesis title:** Word Meaning Representation in Neural Language Models: Lexical Polysemy and Semantic Relationships. **Supervisors:** Marianna Apidianaki and Alexandre Allauzen.

- 2015 2017 Erasmus Mundus European Masters Program in Language and Communication Technologies.
 - Master's thesis: Modelling Differences between Near-Synonyms and its Application to Paraphrasing with Formality. Supervisors: Lonneke van der Plas and Dietrich Klakow.
 - 2016 2017 M.Sc. in Human Language Science and Technology, University of Malta, Msida, Malta. Classification: Distinction.
 - 2015 2016 M.Sc. in Language Science and Technology, *Saarland University*, Saarbrücken, Germany. GPA: 1.3 (excellent).

- 2010 2015 Bachelor's Degree in Linguistics, University of Barcelona, Barcelona, Spain.
 - Majors in Russian and German, 13 distinctions, GPA: 9.2 / 10.
 - Eranet-Mundus Mobility Scholarship: 6 month academic exchange in Saint Petersburg State University, Saint Petersburg (Russia)

Teaching and supervision

- 2021 2024 **Group project supervision** for the IA717 NLP class at Télécom-Paris (M1 Mastère Specialisé en IA). Design of a project of Semantic Textual Similarity and guided supervision of 2-3 student groups per year.
- 2021 2024 Provided more than 60 hours of practical sessions (TP) and 4.5 hours of theoretical courses in NLP at Télécom-Paris and École Polytechnique, mostly at the Master level.
 - 2021 Master Thesis co-supervision (30%) with Marianna Apidianaki. "Representations of troponomy in BERT" by Dmitry Narkevich, for the M.A. in Language Technology of the University of Helsinki.

Related scientific experience

- Senior Area Chair of Lexical Semantics for COLING 2025.
- Area Chair of (Lexical) Semantics (and Pragmatics) for LREC-COLING 2024, NAACL 2024, ACL 2024, CoNLL 2025.
- Reviewer at ACL (2021, 2023), EMNLP (2021, 2022, 2023), EACL (2021), RANLP (2019, 2021, 2023), SemEval (2020), DeeLIO (2022), SRW@ACL (2023, 2024), SRW@EACL (2021,2023), RJC (2023), NLP4DH-IWCLUL (2024), SICon (2023, 2024), UTTER FSTP 2024, TAFFC, ARR.
- Outstanding reviewer at EACL 2021 and ACL 2021.
- Invited talks at the Informatics Department of the University of Turin (May 2024), Jozef Stefan Institute in Ljubjana, Slovenia (Jul 2022), the FoTran group at the University of Helsinki (Feb 2020) and the NLP group at the University of Pennsylvania (Mar 2018).
- Co-organizer of the Social Influence in Conversations (SICon 2024) workshop, co-located with EMNLP.
- Co-organizer of the 2024 ELLIS Doctoral Symposium.
- Attendance to Summer Schools: ESSLLI 2016, ESSLLI 2017, LxMLS 2018.

Awards

- Jul 2023 Outstanding Paper Award at the SICon 2023 Workshop for the paper "Measuring Lexico-Semantic Alignment in Debates with Contextualized Word Representations".
- Jun 2016 Special Award of the Bachelor's Degree in Linguistics at the University of Barcelona (best academic record).

Jun 2015 Eva Monrós Award for the **best final project** in the Bachelor's Degree in Linguistics, "Quantitative approaches to meaning" (Aproximacions quantitatives al significat, in Catalan), Supervisors: M. Antònia Martí and Mariona Taulé.

Skills

- o Python (scikit-learn, PyTorch, Huggingface Transformers, NLTK), R, Unix Shell
- Windows, Linux
- MS Office, LaTeX

Languages

o Catalan, Spanish: native languages

• English: C1 (8.0 / 9.0 IELTS 2015)

o Russian: B2 (TRKI-II 2014)

• French: B2, German: B1, Italian: B1

Publications

- Aina Garí Soler, Jenny Myrendal, Chloé Clavel and Staffan Larsson (2025). The NeWMe Corpus: A gold standard corpus for the study of Word Meaning Negotiation. Submitted to Language Resources and Evaluation (LRE).
- Aina Garí Soler, Matthieu Labeau and Chloé Clavel (2024). The Impact of Word Splitting
 on the Semantic Content of Contextualized Word Representations. Transactions of the
 Association for Computational Linguistics (TACL), 12 299–320.
- Aina Garí Soler (2024). The Use of the Grimacing Face Emoji and its Relation to Bruxism and Temporomandibular Joint Disorders. OSF Preprints.
- Aina Garí Soler, Matthieu Labeau and Chloé Clavel (2023). Measuring Lexico-Semantic Alignment in Debates with Contextualized Word Representations. In Proceedings of the First Workshop on Social Influence in Conversations (SICon 2023), Toronto, Canada, July 14.
- Aina Garí Soler, Matthieu Labeau and Chloé Clavel (2023). Un mot, deux facettes: traces des opinions dans les représentations contextualisées des mots. In Actes de la 30e Conférence sur le Traitement Automatique des Langues Naturelles. Volume 1: conférence principale, Paris, France, June 5-8.
- Aina Garí Soler, Matthieu Labeau and Chloé Clavel (2022). One Word, Two Sides: Traces
 of Stance in Contextualized Word Representations. In Proceedings of the 29th International
 Conference on Computational Linguistics (COLING), Gyeongju, Korea, October 12-17.
- Aina Garí Soler, Matthieu Labeau and Chloé Clavel (2022). Polysemy in Spoken Conversations and Written Texts. In Proceedings of the 13th Language Resources and Evaluation Conference (LREC), Marseille, France, June 20-25.
- Marianna Apidianaki and Aina Garí Soler (2021). ALL Dolphins Are Intelligent and SOME
 Are Friendly: Probing BERT for Nouns' Semantic Properties and their Prototypicality.
 In Proceedings of the Fourth BlackBoxNLP Workshop on Analyzing and Interpreting Neural Networks for NLP, Punta Cana, Dominican Republic and Online, November, 11.

- Aina Garí Soler and Marianna Apidianaki (2021). Let's Play Mono-Poly: BERT Can Reveal Words' Polysemy Level and Partitionability into Senses. Transactions of the Association for Computational Linguistics (TACL), 12:299–320.
- Aina Garí Soler and Marianna Apidianaki (2021). Scalar Adjective Identification and Multilingual Ranking. In Proceedings of the 2021 Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT 2021), Mexico City, Mexico, June 6-11.
- Aina Garí Soler and Marianna Apidianaki (2020). BERT Knows Punta Cana is not just beautiful, it's gorgeous: Ranking Scalar Adjectives with Contextualised Representations.
 In Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP), Nov 16-20.
- Aina Garí Soler and Marianna Apidianaki (2020). MULTISEM at SemEval-2020 Task 3: Fine-tuning BERT for Lexical Meaning. In Proceedings of the 14th International Workshop on Semantic Evaluation, Dec 12-13, Barcelona, Spain.
- Aina Garí Soler, Marianna Apidianaki and Alexandre Allauzen (2019). LIMSI-MultiSem at the
 IJCAI SemDeep-5 WiC Challenge: Context Representations for Word Usage Similarity
 Estimation. In 5th Workshop on Semantic Deep Learning (SemDeep-5)
- Aina Garí Soler, Marianna Apidianaki and Alexandre Allauzen (2019). Word Usage Similarity
 Estimation with Sentence Representations and Automatic Substitutes. Proceedings of the
 8th Joint Conference on Lexical and Computational Semantics (STARSEM 2019), 6-7 Jun, Minneapolis,
 USA.
- Syrielle Montariol, Aina Garí Soler and Alexandre Allauzen (2019). Exploring sentence informativeness. Proceedings of TALN, Jul 1-5, Toulouse, France.
- Aina Garí Soler, Anne Cocos, Marianna Apidianaki and Chris Callison-Burch (2019). A comparison of context-sensitive models for lexical substitution. Proceedings of the 13th International Conference on Computational Semantics (IWCS 2019), 23-27 May, Gothenburg, Sweden.
- Antonia Tovar, Aina Garí Soler, Jesús Ruiz-Idiago, Celia Mareca Viladrich, Edith Pomarol-Clotet, Joana Rosselló, Wolfram Hinzen (2020). Language disintegration in spontaneous speech in Huntington's disease: a more fine-grained analysis. In Journal of Communication Disorders 83 (2020): 105970
- Antonia Tovar Torres, Wolfgang Sebastian Schmeisser Nieto, Aina Garí Soler, Catalina Morey Matamalas, Wolfram Hinzen (2019). Language disintegration under conditions of severe formal thought disorder. Glossa: A Journal of General Linguistics, 4(1), 134.
- Aina Garí, Marianna Apidianaki and Alexandre Allauzen (2018). A comparative study of word
 embeddings and other features for lexical complexity detection in French. In Actes de la
 Conférence TALN. Volume 1 Articles longs, articles courts de TALN, May 14-18, Rennes, France.
- Taulé, Mariona, M. Antònia Martí, Ann Bies, Aina Garí, Montserrat Nofre, Zhiyi Song, Stephanie Strassel and Joe Ellis (2015). Spanish Treebank Annotation of Informal Non-Standard Web Text. Daniel, F. and Díaz O. (Eds.) Proceedings of ICWE-2015, Lecture Notes in Computer Science. Springer Verlag. ISSN 0302-9743
- Muntsa Padró, Núria Bel and Aina Garí (2013). Verb SCF extraction for Spanish with dependency parsing. Procesamiento del Lenguaje Natural 51, 93-100. September 2013