2 March 1993-Gavardo, Italy giulia.rambelli4@unibo.it ngiuliarambelli.github.io/



# Giulia Rambelli

Italian (native) | English & French (proficient)

#### Current Position

Nov 2022 - Postdoctoral Researcher, Department of Modern Languages, Literatures, and Cultures, Alma current Mater Studiorum — University of Bologna.

ABSTRACTION project (ERC-2021-STG-101039777)

#### Research Interests

Lexical and Computational Semantics, Construction Grammars, Usage-based models, Distributional and Neural Models of Language, Language Processing, Compositionality, Analogy, Linguistic Creativity

# Funding and Awards

May 2023 MWE 2023 Best Paper Honorable Mention, Are Frequent Phrases Directly Retrieved like Idioms? An Investigation with Self-Paced Reading and Language Models, Giulia Rambelli, Emmanuele Chersoni, Marco S. G. Senaldi, Philippe Blache, Alessandro Lenci.

August 2021 \*SEM 2020 Best Paper Award, Did the Cat Drink the Coffee? Challenging Transformers with Generalized Event Knowledge, Paolo Pedinotti, Giulia Rambelli, Emmanuele Chersoni, Enrico Santus, Alessandro Lenci, Philippe Blache.

December AACL 2020 Best Paper Award, Comparing Probabilistic, Distributional and Transformer-Based 2020 Models on Logical Metonymy Interpretation, Giulia Rambelli, Emmanuele Chersoni, Alessandro Lenci, Philippe Blache, Chu-Ren Huang.

December Grant allocation Bando VINCI 2020, Capitolo II: Contributi di mobilità per tesi di dottorato 2019 in cotutela, supported by Università franco-italiana (Université franco-italienne).

### Education

#### 2018 – 2022 **Ph.D. in Linguistics**.

Thesis Title: Integrating Distributional and Constructional Approaches: Towards a new Model of Language

Supervisors: Prof A. Lenci (University of Pisa), Prof. P. Blache (Aix-Marseille University)

Graduation date: 14/09/2022

joint degree between

University of Pisa - Italy, XXXIV Corso di Dottorato in Discipline Linguistiche e Letterature Straniere, L-LIN/01.

ColingLab laboratory, Pisa, Italy

Aix-Marseille Université - France, ED 356 Cognition, Langage, Éducation, Sciences du Langage.

LPL - Laboratoire Parole et Langage, Aix-en-Provence, France | ILCB

2015–2018 M.Sc. degree in Informatica Umanistica (LM-43), University of Pisa, Italy, 110/110 cum

Thesis Title: UDLex: un lessico multilingue della struttura argomentale

Supervisor: Prof. A. Lenci Graduation date: 03/05/2018

2012-2015 **B.A. degree in Informatica Umanistica (L-10)**, University of Pisa, Italy, 110/110 cum laude.

Thesis Title: A distributional lexicon for French verb argument structure: the study of LexFr

Supervisor: Prof. A. Lenci, Co-supervisor: Prof. L Prévot

Graduation date: 01/10/2015

#### Traineeships

- March July Erasmus Traineeship, Lattice laboratory, Montrouge, France.
  - 2017 Supervisor: Prof. Thierry Poibeau
  - Sep Dec **Erasmus Traineeship**, Laboratoire Parole et Langage, Aix-en-Provence, France.
    - 2015 Supervisor: Laurent Prévot

### International Research Experience

- 19–21 June Lectures on Computational Linguistics **2024**, *University of Bari*, Bari, Italy. 2024
- 14–15 Jul
   Summer School "Methods In Language Sciences" Linear mixed models course, Ghent
   University, Ghent, Belgium.
   10 hours -Teacher: prof. Shravan Vasishth
- 29–31 May Lectures on Computational Linguistics 2023, *University of Pisa*, Pisa, Italy. 2023
- 26 Jul 13 **32nd European Summer School in Logic, Language, and Information (ESSLLI)**, *Free* Aug 2021 *University of Bozen-Bolzano*, held virtually.
  - 14–15 Jul
     Summer School "Methods In Language Sciences" Eye-Tracking course, Ghent University,
     Ghent, Belgium.
     hours
- 27 Jan 12 **Deep Learning for Natural Language Processing (5th edition)**, *Universidad del Pais Basco*, Feb 2020 San Sebastian, Spain.

  35 hours
- 2–6 Sep 2019 Summer School of the Institute for Language, Communication and the Brain (2nd edition), *ILCB*, Marseille, France.
- 5–9 Aug 2019 **31st European Summer School in Logic, Language, and Information (ESSLLI)**, *University of Latvia*, Riga, Latvia.
- 9–20 Jul 2018 **25th International Summer School in Cognitive Science**, *New Bulgarian University*, Sofia, Bulgaria.
  - 17–28 Jul **29th European Summer School in Logic, Language, and Information (ESSLLI)**, *Toulouse* 2017 *Capitole University*, Tolouse, France.
  - 7 Apr 27 Corso di Neurolinguistica, Scuola Normale Superiore, Pisa, Italy.
  - May 2016 Professor: Valentina Bambini. 30 hours

#### Technical Skills

- programming Python including ML and DL tools (Gensim, SciKit Learn, Pytorch) •••••, Javascript ••••, PHP ••••, Java ••••
  - statistical R •••• analysis

LATEX ...., XML ...., HTML/ CSS ....

languages

DB adminis- MySQL ••••, Neo4j ••••

tration

design Adobe Photoshop ••••, Adobe Illustrator•••, Adobe InDesign ••••

#### Languages

Italian Native Speaker

English **fluent** 

Writing workshop for both experienced and young academics CLI - Università di Pisa, (31/07/2015): C1

French fluent

#### Academic Activities

#### Invited talks

2024 "Word Specificity: A Measure to Investigate Semantic Abstraction and Linguistic Creativity". Invited talk at the CBS Seminars organized by Emmanuele Chersoni, The Hong Kong Polytechnic University. Hong Kong, 6 August 2024.

"Word Specificity: A Measure to Investigate Semantic Abstraction and Linguistic Creativity". Invited talk at Trinity College organized by Tony Veale. Dublin (Ireland), 6 June 2024

"Compositionality beyond simple compositionality. A constructionist and distributional perspective". Invited talk at the Natural Language Processing group organized by prof. Aline Villavicencio, University of Sheffield. Online, 7 Oct 2022

"Compositionality as an Analogical Process". Invited talk at the CBS Research Group Meeting, The Hong Kong Polytechnic University. Online, 28 Sep 2022

#### Conference Organization

- Member of the organizing committee of CMCL 2024 (The 13th edition of the Workshop on Cognitive Modeling and Computational Linguistics), colocated with ACL 2024 (2024). Bangkok, Thailand.
- 2020 Member of the organizing committee of ATE\_ABSITA task at EVALITA 2020 (2020). Online.
- 2019 Member of the organizing committee of Interruzioni & Cesure International Graduate Conference (2019). Pisa, Italy.

Reviewer

Conference ACL 2023, \*SEM 2023, EACL 2023, EMNLP 2022, COLING 2022, CMCL 2022; AIXIA2021, EMNLP 2021, CMCL 2021; CMCL 2020, COLING 2020, LiNCR 2020; ACL 2019, CMCL 2019, **IWCS 2019** 

# Teaching Activities

2023 **Tutor in General Linguistics (9cfu)**, Laurea Triennale in Lingue e Letterature Straniere (BA in Foreign Languages and Literatures), in collaboration with Prof. Marianna Bolognesi, Department of Modern Languages, Literatures, and Cultures, Alma Mater Studiorum - University of Bologna. academic year 2023-2024

Guest Lecturer, Laurea Triennale in Lingue e Letterature Straniere (BA in Foreign Languages and Literatures), Alma Mater Studiorum - University of Bologna, Course of General Linguistics held by prof. Marianna M. Bolognesi.

Title: "Grammatica delle Costruzioni"

**Guest Lecturer**, Laurea Triennale in Lingue e Letterature Straniere (BA in Foreign Languages and Literatures), Alma Mater Studiorum - University of Bologna, Course of General Linguistics held by prof. Marianna M. Bolognesi.

Title: "La Composizione"

2022 **Guest Lecturer**, Master program in "Italian Culture and Language for Foreigners"/ "Italian Studies, European Literary Cultures, Linguistics", Alma Mater Studiorum - University of Bologna, Course of Lexical Semantics / Semantics and Lexicon held by prof. Francesca Masini.

Title: "Come processiamo espressioni con diversi gradi di composizionalità: un caso di studio"

# Publications — Peer-reviewed international journal articles

- 2024 Giulia Rambelli, Emmanuele Chersoni, Davide Testa, Philippe Blache, Alessandro Lenci (2024).
  Neural Generative Models and the Parallel Architecture of Language: A Critical Review and Outlook. Topics in cognitive science.
- 2023 Carina Kauf, Anna A Ivanova, **Giulia Rambelli,** Emmanuele Chersoni, Jingyuan Selena She, Zawad Chowdhury, Evelina Fedorenko, Alessandro Lenci (2023). *Event knowledge in large language models: the gap between the impossible and the unlikely.* Cognitive Science 47 (11):e13386.

# Publications — Conference proceedings

2024 **Giulia Rambelli**, Emmanuele Chersoni, Claudia Collacciani, and Marianna Bolognesi (2024). *Can Large Language Models Interpret Noun-Noun Compounds? A Linguistically-Motivated Study on Lexicalized and Novel Compounds.* In Proceedings of the 62nd Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 11823–11835.

Claudia Collacciani, **Giulia Rambelli**, Marianna Bolognesi (2024). *Quantifying Generalizations:* Exploring the Divide Between Human and LLMs' Sensitivity to Quantification. In Proceedings of the 62nd Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers), pages 11811–11822.

Tatsuki Kuribayashi, **Giulia Rambelli**, Ece Takmaz, Philipp Wicke, and Yohei Oseki (2024). *Proceedings of the Workshop on Cognitive Modeling and Computational Linguistics*. Association for Computational Linguistics, Bangkok, Thailand, edition.

**Giulia Rambelli** and Marianna M. Bolognesi (2024). *The Contextual Variability of English Nouns: The Impact of Categorical Specificity beyond Conceptual Concreteness.* In Proceedings of the 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024): 15854–15860.

2023 Claudia Collacciani Collacciani and **Giulia Rambelli** (2023). *Interpretation of Generalization in Masked Language Models: An Investigation Straddling Quantifiers and Generics.* In Proceedings of the 9th Italian Conference on Computational Linguistics (CLiC-it 2023).

**Giulia Rambelli** and Marianna M. Bolognesi (2023). Contextual Variability depends on Categorical Specificity rather than Conceptual Concreteness: A Distributional Investigation on Italian data. In Proceedings of the 15th International Conference on Computational Semantics (IWCS 2023).

**Giulia Rambelli**, Emmanuele Chersoni, Marco S. G. Senaldi, Philippe Blache, and Alessandro Lenci (2023). Are Frequent Phrases Directly Retrieved like Idioms? An Investigation with Self-Paced Reading and Language Models. In Proceedings of the 19th Workshop on Multiword Expressions (MWE 2023).

2022 **Giulia Rambelli**, Emmanuele Chersoni, Philippe Blache, Alessandro Lenci (2022). *Compositionality as an Analogical Process: Introducing ANNE*. In Proceedings of CogALex VII 2022.

- 2021 Paolo Pedinotti, **Giulia Rambelli**, Emmanuele Chersoni, Enrico Santus, Alessandro Lenci, Philippe Blache (2021). *Did the Cat Drink the Coffee? Challenging Transformers with Generalized Event Knowledge*. Proceedings of \*SEM 2021.
- 2020 Lorenzo De Mattei, Graziella De Martino, Andrea Iovine, Alessio Miaschi, Marco Polignano, **Giulia** Rambelli (2020). ATE\_ABSITA @ EVALITA2020: Overview of the Aspect Term Extraction and Aspect-based Sentiment Analysis Task. Proceedings of EVALITA2020.
  - **Giulia Rambelli**, Emmanuele Chersoni, Alessandro Lenci, Philippe Blache, Chu-Ren Huang. *Comparing Probabilistic, Distributional and Transformer-Based Models on Logical Metonymy Interpretation*. Proceedings of the 1st Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics and the 10th International Joint Conference on Natural Language Processing.
- 2019 **Giulia Rambelli**, Emmanuele Chersoni, Philippe Blache, Chu-Ren Huang and Alessandro Lenci (2019). *Distributional Semantics Meets Construction Grammar. Towards a Unified UsageBased Model of Grammar and Meaning*. Proceedings of The First International Workshop on Designing Meaning Representations (DMR).
- 2017 **Giulia Rambelli**, Alessandro Lenci, and Thierry Poibeau (2017). *Udlex: Towards cross-language subcategorization lexicons*. In Proceedings of the Fourth International Conference on Dependency Linguistics (DepLing 2017).
- 2016 Emmanuele Chersoni, Giulia Rambelli, and Enrico Santus (2016). Cogalex-v shared task: ROOT18. In Proceedings of the 5th Workshop on Cognitive Aspects of the Lexicon, CogALex@COLING 2016.
  - **Giulia Rambelli**, Gianluca E. Lebani, Laurent Prévot, and Alessandro Lenci (2016). *LexFr: Adapting the LexIt framework to build a corpus-based French subcategorization lexicon*. In Proceedings of the 10th International Conference on Language Resources and Evaluation (LREC 2016).

#### Attended Conferences

- 2024 ACL 2024, in Bangkok (Thailand), 11-16 August 2024 Two poster presentations
  - Analogy-ANGLE (The First Workshop on Analogical Abstraction in Cognition, Perception, and Language colocated with IJCAI 2024), in Jeju (South Korea), 4 August 2024 *Two oral presentations*
  - LREC-COLING, in Turin (Italy), 20-25 May 2024 Poster presentation
- 2023 CLiC-it 2023, in Venice (Italy), 30 November-2 December 2023 *Oral presentation* IWCS 2023, Nancy (France), 20-23 June 2023 *Oral presentation* 
  - MWE 2023 (19th Workshop on Multiword Expressions), colocated with EACL 2023, 6 May 2023 Oral presentation
  - EACL 2023 (17th Conference of the European Chapter of the Association for Computational Linguistics), in Dubrovnik (Croatia), 2-6 May 2023
  - CompCog23 (Complexity and Cognition symposium), online, 1 Feb 2023
- 2022 CogALex-VII (7th Workshop on Cognitive Aspects of the Lexicon), online 20 Nov 2022 *Oral Presentation* 
  - HSP 2022 (35th Annual Conference on Human Sentence Processing) Conference, online, 24-26 March 2022 *Poster presentation*
- 2021 SIG 2021 (XL Convegno della Società Italiana di Glottologia), in Pisa (Italy),21-23 Oct 2021 \*SEM 2021 (The Tenth Joint Conference on Lexical and Computational Semantics), online, 5-6 Aug 2021 Poster presentation
  - CLiC-it 2020 (7th Italian Conference on Computational Linguistics), online, 1-3 March 2021

- 2020 EVALITA 2020 (7th Evaluation Campaign of Natural Language Processing and Speech Tools for Italian), online, 17 Dec 2020 *organizer for ATE\_ABSITA task* 
  - AACL 2020 (1st Conference of the Asia-Pacific Chapter of the Association for Computational Linguistics), online, 4-7 December 2020 *Oral presentation*
  - GECKo (Integrating Generic and Contextual Knowledge symposium), online, 18 May 2020
- 2019 JAD 2019 (Journée Annuelle des Doctorants 2019), in Aix-en-Provence (France), 13 Dec 2019– *Poster presentation* 
  - DMR 2019 (1st workshop on Designing Meaning Representations), colocated with ACL 2019, 1 Aug  $2019 Poster\ presentation$
  - ACL 2019 (57th Annual Meeting of the Association for Computational Linguistics), in Florence (Italy), 28 Jul-2 Aug 2019
- 2018 CLiC-it 2018 (5th Italian Conference on Computational Linguistics), in Turin (Italy), 10-12 Dec 2018
- 2017 CLiC-it 2017 (4th Italian Conference on Computational Linguistics), in Rome (Italy), 11-13 Dec 2017
  - Depling 2017 (4th International Conference on Dependency Linguistics), in Pisa (Italy), 18-20 Sep 2017 Poster presentation
- 2016 CLiC-it 2016 (3th Italian Conference on Computational Linguistics), in Naples (Italy), 5-6 Dec 2016
  - LREC 2016, in Portorož (Slovenia), 23-28 May 2016 Oral presentation
- 2015 CLiC-it 2015 (2th Italian Conference on Computational Linguistics), in Trento (Italy), 10-11 Dec 2015

Autorizzo il trattamento dei miei dati personali presenti nel CV ai sensi dell'art. 13 d. lgs. 30 giugno 2003 n. 196 - "Codice in materia di protezione dei dati personali" e dell'art. 13 GDPR 679/16 - "Regolamento europeo sulla protezione dei dati personali"

I give consent to process my data with the purpose of the recruitment process, in accordance to the Regulation of the European Parliament 679/2016, regarding the protection of natural persons and free movement of such data.

last updated: September 2, 2024