Preface to the Ninth Workshop on Natural Language for Artificial Intelligence (NL4AI 2026)

Alessandro Bondielli[1], Giovanni Bonetta[2], Elisa Leonardelli[2] and Irene Siragusa[3]

[1]University of Pisa, Pisa, Italy
[2]Fondazione Bruno Kessler, Trento, Italy
[3]University of Palermo, Palermo, Italy

1. Introduction

The Natural Language for Artificial Intelligence (NL4AI) workshop, supported by the Special Interest Group on NLP of the Italian Association for Artificial Intelligence (AIxIA)[1] and by the Italian Association of Computational Linguistics (AILC)[2], aims at providing a broad overview of recent activities in the field of Human Language Technologies (HLT) in Italy and foster further research on the topic. Since its first edition in 2017, the workshop has served as a forum for researchers to share insights, collaborate, and discuss innovations at the intersection of Natural Language Processing (NLP) and Artificial Intelligence (AI). As in previous years, this edition of the workshop was held in conjunction with the 24th International Conference of the Italian Association for Artificial Intelligence (AIxIA 2026)[3], which took place on October 6-9, 2026, in Perugia, Italy. The workshop program is available on the official website[4].

The workshop covered key topics examining the role of Computational Linguistics and Natural Language Processing in Artificial Intelligence applications, including:

- NLP and AI Applications (health, legal domain, social media and journalism, etc.)
- Natural Language Interfaces for Human Robot Interaction
- Resources, Benchmarks, and Evaluation
- Discourse and Pragmatics
- Semantics
- Natural Language Generation
- Creativity, Style, and Narrative Generation
- Summarization
- Information Extraction in AI Applications
- Machine Learning for NLP
- LLMs, Foundation Models and Applications
- Interpretability, Explainability and Analysis of Models for NLP
- Natural Language Inference
- Question Answering and Reading Comprehension
- Sentiment Analysis, Opinion Mining, and Argumentation
- Abusive Language Detection and Analysis
- NLP for Fact Checking, Fake News Detection and Analysis

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alessandro.bondielli@unipi.it (A. Bondielli); gbonetta@fbk.eu (G. Bonetta); eleonardelli@fbk.eu (E. Leonardelli); irene.siragusa02@unipa.it (I. Siragusa)

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[1]Group on NLP of AIxIA website: https://aixia.it/en/gruppi/elaborazione-del-linguaggio-naturale/
[2]AILC website: https://www.ai-lc.it/en/
[3]AIxIA 2026 website: https://aixia2026.unipg.it/
[4]NL4AI workshop website: http://sag.art.uniroma2.it/NL4AI/

- Conversational Agents in Human-Computer Interaction
- Speech and Spoken Language Processing
- Language and other Multimodality
- Multimodal (text-image) data sources
- Machine Translation and Multilinguality
- Low-Resource NLP and Linguistic Diversity
- Cognitive Modeling and Psycholinguistics
- Computational Historical Linguistics, Social Science, and Cultural Analytics
- Ethics, Fairness, and Societal Impacts of NLP
- NLP and Industrial Challenges

The program co-chairs would like to warmly thank all the authors of the submitted papers, the two invited speakers, and all the participants in this edition. Special thanks go to the University of Perugia (Italy) for hosting the event and to the organizers of the AIxIA 2026 conference. Moreover, we thank the AILC Board members for their trust and support.

2. Submission and Review Process

The workshop received 26 submissions, of which 3 have been withdrawn, while 14 papers were accepted for inclusion in these proceedings. Peer review was conducted in a single-blind format by members of the Program Committee.

Each paper undergoing peer review was required to receive at least two reviews.

The final paper submission deadline was July 24, 2026, following an extension of the original June 29 deadline. Acceptance notifications were scheduled for August 19, 2026, and the camera-ready deadline was August 31, 2026. These deadlines were set at 23:59 Anywhere on Earth (AoE).

3. Accepted Papers

The following 14 papers are included in this volume, in the same order as in the table of contents:

1. Irene Siragusa and Roberto Pirrone - *Evaluating Clinical Coding Alignment Across ICD-9, ICD-10, and ICD-11 with a Semantic Retrieval Approach.*
2. Giulio Alfarano, Stefano Scotta, and Alberto Messina - *Comparing Generated Pseudo-Labeled News Datasets: A Retrieval-and-Verification Approach.*
3. Salvatore Ricciardi, Simone Scaboro, Beatrice Turano, Cristina Giannone, Andrea Favalli, and Raniero Romagnoli - *Who Judges the Judges? A Multilingual Probe for Complementary LLM Evaluation Metrics.*
4. Francesco Colace, Sabrina Galano, Angelo Lorusso, Domenico Santaniello, Giusy Strollo, and Annapia Tanzola - *Machine Translation of Low-Resource Historical Languages: A Comparative Study of LLMs on Old Occitan.*
5. Serena Auriemma, Martina Miliani, Alessandro Bondielli, Lucia Passaro, and Alessandro Lenci - *Right for the Right Reasons? A Chain-of-Thought Analysis of Commonsense Causal Reasoning.*
6. Elena Opreni, Alice Pietrasanta, Davide Altieri, Giulia Rizzi, and Elisabetta Fersini - *Evaluating Watermark Resilience in Italian Large Language Models Under Back-Translation Attacks.*
7. Goshgar C. Ismayilov - *MAWGE: A Parametric and Synthetic Multi-Agentic Workflow Generator Library.*
8. Ejdis Gjinika, Luca Putelli, Ivan Serina, and Alfonso Emilio Gerevini - *Exploring the Relationship between Sparse Autoencoder Activations and Sentence Complexity.*
9. Claire Lawand, Haeeul Hwang, Jalal Al-Tamimi, Motasem Alrahabi, Mahshid Hozhabr, Deok-Hee Kim-Dufor, Christophe Lemey, Julien Desclés, and Valeria Lucarini - *The Prosody of Clinical Speech: Annotation and Computational Analysis of Psychiatric Interviews.*

10. Endang Wahyu Pamungkas, Maryam, Rona Rizkhy Bunga Chasana, Dade Nurjanah, and Ikhlasul Amal - *Static or Dynamic? Exploring Cross-Lingual Few-Shot Transfer for Indonesian Misogynistic Meme Detection.*
11. Chiara Manno and Martina Miliani - *Same Job, Different Gender: Uncovering LLM Stereotypes via Counterfactual Biographies.*
12. Alessandro Pucci, Danilo Croce, and Roberto Basili - *Scale or Specialization? Evaluating Language Models for Italian Fact Verification.*
13. Samuele D'Avenia, Timothy Meinert, Marta Marchiori Manerba, Valerio Basile, and Anna Koufakou - *Does Perspective Matter? Annotation Role Alignment in Emotion Recognition.*
14. Michał Tomasz Godziszewski, Mateusz Galiński, Rzyszard Tuora, Mateusz Czyżnikiewicz, Tomasz Ziętkiewicz, Adam Kozakiewicz, and Cristina Cornelio - *Election-Based Evaluation Methods for NLG-Systems.*

4. Keynote Speakers

The workshop program features two invited keynote talks:

- Marco Turchi, Head of the Machine Translation group at Zoom. Talk title: *Beyond Models: The Impact of AI on NLP through the Lens of Machine Translation.*
- Lorenzo De Mattei, Co-founder and CPTO at APTUS.AI. Talk title: *Back to the Future: From Models Back to Systems in NLP.*

5. Program Committee

We thank the members of the Program Committee for their time, expertise, and contribution to the review process.

- Anzal Husain Abidi, Independent Researcher, India
- Giuseppe Attardi, University of Pisa, Italy
- Serena Auriemma, University of Pisa, Italy
- Pierpaolo Basile, University of Bari, Italy
- Valerio Basile, University of Turin, Italy
- Roberto Basili, University of Rome Tor Vergata, Italy
- Federico Borazio, University of Rome Tor Vergata, Italy
- Sofia Brenna, Fondazione Bruno Kessler, Free University of Bozen-Bolzano, Italy
- Dominique Brunato, Institute of Computational Linguistics "A. Zampolli" (National Council of Research), Italy
- Pierluigi Cassotti, University of Gothenburg, Sweden
- Danilo Croce, University of Rome Tor Vergata, Italy
- Samuele D'Avenia, University of Turin, Italy
- Nguyen Dung, FPT University, Vietnam
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- Alessandro Lenci, University of Pisa, Italy
- Bernardo Magnini, Fondazione Bruno Kessler, Italy
- Marta Marchiori Manerba, University of Turin, Italy

- Mouhamed Mbaye, GalsenAI, Senegal
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- Teresa Paccosi, KNAW Humanities Cluster DHLab, Netherlands
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- Marco Polignano, University of Bari, Italy
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- Salvatore Ricciardi, Almawave, Italy
- Daniel Russo, Fondazione Bruno Kessler, Italy
- Domenico Santaniello, University of Salerno, Italy
- Stefano Scotta, RAI - Centro Ricerche, Innovazione Tecnologica e Sperimentazione, Italy
- Lucia Siciliani, University of Bari, Italy
- Marco Antonio Stranisci, University of Turin, Italy
- Salvatore Varriale, University of Genova, Italy
- Jianqiang Wang, University of Buffalo, USA