Andrea Piergentili

SUMMARY

A dedicated PhD student specializing in gender-inclusive machine translation (MT), promoting fairness in technology, and committed to advancing the field through innovative research and collaboration.

PROJECTS

9 GENTE

Info GENTE is a natural, bilingual (English-Italian) corpus designed to benchmark the ability of MT systems to generate **gender-neutral** translations. GeNTE features 1,500 parallel sentences enriched with manual annotations and features a balanced distribution of phenomena that either entail a gender-neutral or a gendered translation. GENTE is available on Hugging Face.

Role Data collection, selection, editing, and annotation. Coordination of the professional translators who produced the gender-neutral Italian references. Dataset validation.

* NEO-GATE

Info Neo-GATE is a bilingual corpus designed to benchmark the ability of machine translation systems to translate from English into Italian using gender-inclusive **neomorphemes**. Neo-GATE is adaptable to any Italian neomorpheme paradigm thanks to an extensive annotation. Neo-GATE is available on Hugging Face.

Role Data collection, selection, editing, and annotation. Dataset validation. Adaptation and evaluation scripts programming.

SELECTED PUBLICATIONS

Piergentili, Andrea, Beatrice Savoldi, Matteo Negri, and Luisa Bentivogli (June 2024). "Enhancing Gender-Inclusive Machine Translation with Neomorphemes and Large Language Models". In: *Proceedings of the 25th Annual Conference of The EAMT*. European Association for Machine Translation. URL: https://aclanthology.org/2024.eamt-1.25/.

Savoldi, Beatrice, Andrea Piergentili, Dennis Fucci, Matteo Negri, and Luisa Bentivogli (Mar. 2024). "A Prompt Response to the Demand for Automatic Gender-Neutral Translation". In: *Proceedings of the 18th Conference of the European Chapter of the ACL (Volume 2: Short Papers)*. Malta: Association for Computational Linguistics, pp. 256–267. URL: https://aclanthology.org/2024.eacl-short.23.

Piergentili, Andrea, Beatrice Savoldi, Dennis Fucci, Matteo Negri, and Luisa Bentivogli (Dec. 2023). "Hi Guys or Hi Folks? Benchmarking Gender-Neutral Machine Translation with the GeNTE Corpus". In: *Proceedings of the 2023 EMNLP Conference*. Singapore: Association for Computational Linguistics, pp. 14124–14140. URL: https://aclanthology.org/2023.emnlp-main.873.

Piergentili, Andrea, Dennis Fucci, Beatrice Savoldi, Luisa Bentivogli, and Matteo Negri (June 2023). "Gender Neutralization for an Inclusive Machine Translation: from Theoretical Foundations to Open Challenges". In: *Proceedings of the First GITT Workshop*. Tampere, Finland: European Association for Machine Translation, pp. 71–83. URL: https://aclanthology.org/2023.gitt-1.7.

A complete list of publications is available on Google Scholar.

Conferences and workshops

1st LaGendA conference

Venice, Italy – Oct 2024

Presented a research communication about the challenges of gender-inclusive machine translation.

25th European Association for Machine Translation conference Sheffield, UK – Jun 2024

Presented the paper Enhancing Gender-Inclusive Machine Translation with Neomorphemes and Large Language Models.

2nd Gender-Inclusive Translation Technologies workshop

Sheffield, UK – Jun 2024

Presented a research communication on gender-neutral translation.

1st Gender-Inclusive Translation Technologies workshop

Tampere, Finland – Jun 2023

Presented the paper Gender Neutralization for an Inclusive Machine Translation.

1st Gender Equality and Artificial Intelligence workshop

L'Aquila, Italy – Nov 2022

Presented motivation for and progress of the creation of GeNTE.

EDUCATION

PhD @ University of Trento + Fondazione Bruno Kessler. 2022 - now

Trento, IT

Topic: Gender-Inclusive Machine Translation.

Advisors: Matteo Negri (FBK), Luisa Bentivogli (FBK).

Master's Degree @ University of L'Aquila.

Program: Languages and cultures for international communication and cooperation.

MD thesis: Gender-Inclusive Language: From Theoretical Approaches to Building a 2018 - 2022

Test Set for Machine Translation.

L'Aquila, IT

Supervisors: Maria Giovanna Fusco (UnivAQ), Luisa Bentivogli (FBK).

Final grade: 110/110 cum laude.

Q Best 2022 UnivAQ thesis on 'Equal opportunities and combating discrimination'.

Bachelor's Degree @ University of L'Aquila.

2015 - 2018 Program: Cultural and linguistic mediation.

L'Aquila, IT Supervisor: Maria Giovanna Fusco (UnivAQ).

Final grade: 110/110 cum laude.

Work Experience

☐ Internship @ Machine Translation unit, Fondazione Bruno Kessler Jan 2022 - Jun 2022 Creation of a multilingual benchmark for the evaluation of gender neutral MT (see GENTE above).

- Research tasks: reviewing language, gender, and ethics literature; surveying relevant guidelines for gender-inclusive language in English, and Italian, identifying gender-neutralization strategies.
- Development tasks: reviewing candidate corpora to identify an ideal base corpus, benchmark design.

SKILLS

</>IT Python programming, LATEX writing, HPC environments (SLURM-based and AWS), git

systems (GitHub, GitLab, Hugging Face), Streamlit apps, macOS and Linux OS.

66 Research Literature review and monitoring, experimental design, dataset creation and curation, quantitative and qualitative analysis, scientific writing, research communication.

Service. Reviewer for: ACL Rolling Review, GITT workshop, CLiC-it.

Soft skills Teamwork, collaboration, decision making, time management.

Az Languages Italian (native), English (C1), Spanish (B1).