



UNIVERSITÀ
DEGLI STUDI
DI PADOVA



FISPPA
Dipartimento di Filosofia, Sociologia,
Pedagogia e Psicologia Applicata



IQLA-GIAT Summer School in *Quantitative Analysis of Textual Data*

University of Padua

8-12 September 2025

7th edition

Final Report

Active since 2013 and now in its seventh edition, the IQLA-GIAT International Summer School in *Quantitative Analysis of Textual Data* is a distinguished training opportunity in the fields of computational text analysis and digital humanities.

The seventh edition of the Summer School took place at the University of Padua, Department of *Philosophy, Sociology, Education and Applied Psychology* (FISPPA), Palazzo de Claricini, from Monday 8th to Friday 12th September 2025.

The Summer School was funded by the University of Padua, co-funded by the Department of *Philosophy, Sociology, Education and Applied Psychology* (FISPPA), coordinated by prof. Arjuna Tuzzi (University of Padua, Dept. FISPPA) and organized by GIAT – *Interdisciplinary Text Analysis Group* (www.fisppa.unipd.it/giat-en/home) in collaboration with IQLA – *International Quantitative Linguistics Association* (www.iqla.org).

The teaching staff included 12 lecturers from 6 countries (Austria, Italy, Hungary, Poland, Greece, US), 10 different affiliations: University of Vienna (Austria), University of Padua, University of Trieste, University of Udine, University of Rome Tor Vergata, Sapienza University of Rome (Italy), University of Wrocław (Poland), Duquesne University (Pittsburg, Pennsylvania, US), National and Kapodistrian University of Athens (Greece), Eötvös Loránd University (Budapest Hungary).

In terms of the number and quality of participants, the Summer School achieved good success: the 19 selected participants (out of 31 applications) belonged to nine scientific branches - data science, economics, education, human rights, linguistics, oenology, political science, sociology, and statistics - and came from five different countries: Spain, US, Norway, Czechia, and Italy. The participants' CVs were excellent and well suited for the Summer School objectives in terms of their specific research interests, experiences and interdisciplinary viewpoints.

Teaching activities

Methods for the quantitative analysis of textual data are an object of research in linguistics, computer science, social sciences, mathematics, and statistics but they also serve as valuable research tools across further disciplines, such as psychology, philosophy, sociology, sociolinguistics, education, history, political studies, literary studies, communication, and media studies (to mention just a few).

Digital sources that provide archives of books, documents, and journals or disseminate information, such as newspapers and social media, now constitute an essential foundation for many research studies. Recent developments in computational methods and large language models have not only transformed how research is conducted in the humanities and social sciences but also reshaped how it is conceived and designed. The demand for data scientists is growing in all disciplines, both in academia and in productive and commercial sectors, and a new

generation of researchers must be trained to apply data science methods to a wider range of applications.

The IQLA-GIAT Summer School is defined by three main elements:

1. A general section dedicated to quantitative methods for text analysis.
2. A distinctive methodological topic that has changed in each edition.
2025: Large Language Models: Does AI Challenge Traditional Methods?
2023: Language Variation and Change from a Computational Perspective
2021: Quality of Texts quality of News (online edition)
2019: Data Science and Data scientists in Humanities and Social Sciences
2017: Topic detection and authorship attribution in Elena Ferrante's case-study
2015: Measuring style and computational stylistics
2013: Measures and methods in authorship attribution
3. Lab-tutorials dedicated to case studies and computer-aided analysis of textual data.

This edition's topic was the challenges that artificial intelligence (AI) and the use of large language models (LLMs) have posed to traditional methods of textual data analysis. The guiding question for the 2025 edition is "Large Language Models: Does AI Challenge Traditional Methods?". The activities of the School were designed to stimulate critical reflection on the advantages and limitations of methods, and to engage participants in an interdisciplinary context to discuss the potential, challenges, and opportunities of different approaches. The interdisciplinarity of the School was ensured both by the presence of speakers from various scientific fields and by the diverse backgrounds of the participants.

The School aimed to share knowledge on methods, software, corpora, scientific literature, and research outcomes; promoted dialogue among disciplines on a timely issue such as the use of LLMs in text analysis; developed innovative analytical tools and integrated research methods; introduced young researchers to high-quality research environments. Both lab and talking sessions took place in room "Valeria Solesin" at Palazzo de Claricini (Department of Philosophy, Sociology, Education and Applied Psychology, Sociology buildings, via M. Cesarotti 10/12, Padova).

At the end of the classes, the participants filled in a questionnaire to assess the main aspects of the Summer School (e.g. organization, teaching, materials, expectations, satisfaction rate, suggestions etc.) and a self-assessment test to check what they got from the school. The organizers were very pleased with the assessment because the participants' opinions were very positive towards the classes and the school in general. Moreover, they provided useful insights to improve the performance of the next editions.

Lecturers

Dimitris Biliarios – Greece, National and Kapodistrian University of Athens
Fabio Ciotti – Italy, Università di Roma Tor Vergata
Palkó Gábor – Hungary, Budapest, Eötvös Loránd University
Francesca Gambarotto – Italy, Università di Padova
Patrick Juola – US, Pittsburgh, Duquesne University
Emmerich Kelih – Austria, Universität Wien
Alessandro Meneghini – Italy, Università di Udine
Stefano Ondelli – Italy, Università di Trieste
Adam Pawlowski – Poland, University of Wrocław
Valentina Rizzoli – Italy, Sapienza Università di Roma
Ilenia Sanna – Italy, Università di Padova
Floriana Sciumbata – Italy, Università di Trieste

Enjoyable details

The Summer School program included lunch for each day of the school, social dinner, and coffee breaks. All participants and teachers received a conference kit including gadgets (bag, folder, maps, block-notes, pen, etc.), brochures and flyers about the hosting town. Besides this, the Summer School staff was in contact through social platforms with participants and lecturers to provide them with all the necessary information and details for their stay.



Many thanks to...

- University of Padua for funding this seventh edition of the IQLA-GIAT Summer School;
- Department FISPPA for co-funding this seventh edition of the IQLA-GIAT Summer School and for the great support provided by its technical and administrative staff;
- members of the GIAT group and the IQLA association;
- colleagues, and scholars, for joining the Summer School as lecturers and sharing with participants their expertise, research experiences and knowledge;
- candidates for their application and selected participants for joining the Summer School and showing great enthusiasm and willingness to learn.

What's next?

Keep an eye out for the next edition...

<https://www.giat.org>

Organizing Committee

*Francesco Gatti, Alessandro Meneghini, Valentina Rizzoli, Ilenia Sanna, Irene Saonara,
Stefano Sbalchiero, Andrea Sciandra and Arjuna Tuzzi*

[the Summer School crew]

PROGRAM

Monday, September 8th

09.30-11.00 Registration and Welcome

11.00-11.30 School Opening

11.30-13.00 Adam Pawlowski - *Can generative AI write books? Stylometric analysis of AI-generated texts, on the examples of the French-speaking European and African literature* (with T. Walkowiak)

13.00-14.30 *Welcome Lunch*

14.30-16.00 Fabio Ciotti – *Artificial Model Readers: exploring the narrative spaces with LLMs*

16.00-16.30 *Coffee Break*

16.30-18.00 Emmerich Kelih – *Quantitative linguistics: current state of the art, challenges and perspectives*

Tuesday, September 9th

09.30-11.00 Emmerich Kelih – *How to model language and text data: the impact of linguistics laws*

11.00-11.30 *Coffee break*

11.30-13.00 Palkó Gábor – *From corpora through word embeddings to LLM's: an introduction*

13.00-14.30 *Lunch*

14.30-16.00 Patrick Juola – *LLM Functionality: How I Learned to Stop Worrying and Love ChatGPT*

16.00-16.30 *Coffee break*

16.30-18.00 Dimitris Bilianos – *Getting started with text processing with Python*

Wednesday, September 10th

09.30-11.00 Dimitris Bilianos – *An introduction to Sentiment analysis*

11.00-11.30 *Coffee break*

11.30-13.00 Palkó Gábor – *Word embeddings, prompting LLM models and GPT based services: a hands-on training*

13.00-14.30 *Lunch*

14.30-16.00 Valentina Rizzoli e Alessandro Meneghini - *Working group Lab*

16.00-16.30 *Coffee break*

16.30-18.00 Visita a palazzo Bo

Thursday, September 11th

09.30-11.00 Stefano Ondelli – *Corpus Design in the age of AI: methodological choices and research implications*

11.00-11.30 *Coffee Break*

11.30-13.00 Floriana Sciumbata – *Prompt me, maybe? Crafting requests for better (?) results*

13.00-14.30 *Lunch*

14.30-16.00 Patrick Juola – *Literary Creativity in Large Language Models* (with G. Currier)

16.00-16.30 *Coffee Break*

16.30-18.00 Valentina Rizzoli e Alessandro Meneghini - *Working group Lab*

20.00 *Social Dinner*

Friday, September 12th

09.30-11.00 Francesca Gambarotto – *How is sustainability framed? Data and narrative around the ecological transition*

11.00-11.30 *Coffee Break*

11.30-13.00 Valentina Rizzoli e Alessandro Meneghini - *Working group Lab*

13.00-14.30 *Goodbye Lunch*

14.30-16.00 Ilenia Sanna - *Final assessment*