

IQLA-GIAT International Summer School

in

## **Quantitative Analysis of Textual Data**

*4th edition*

Recent developments in digital methods are not only changing how research is conducted in the humanities and social sciences, but also how new research is planned and designed. In order to reach the full potential and benefits of this revolution, most research activities need a new generation of researchers: data scientists for humanities and social sciences.

Digital methods are being utilised by a variety of disciplines. The growing availability of large corpora and large databases calls for new methods that are able to deal with new problems, open the door to new questions and develop new knowledge.

### **Presentation**

"Distant Reading", "Digital Methods", "Computational social sciences" and "Statistical learning from textual data" are general terms that refer to a wide range of methods that have a common aim: retrieving information from texts by means of computer-aided tools. Today, computer-aided text analysis is an umbrella term referring to a number of qualitative, quantitative and mixed-methods approaches. It is an object of research in many sectors of linguistics, computer sciences, mathematics and statistics. Furthermore, computer aided text analysis is used as a research tool within a number of disciplines such as psychology, philosophy, sociology, sociolinguistics, education, history, political studies, literary studies, communication and media studies. The recent evolution of information technologies (IT) and computational methods has led to a number of distinct but interrelated sectors (e.g. computational linguistics, information retrieval, natural language processing, text mining, text analytics, sentiment analysis, opinion mining, topic extraction, etc.) with interesting industrial applications, such as electronic dictionaries, artificial intelligence, plagiarism detection and similar.

Recent studies have stressed the need for developing, adopting and sharing interdisciplinary approaches. The IQLA-GIAT Summer School is the ideal environment for developing innovative analytical tools by pooling together the research methods from different disciplines.

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

1. a general part devoted to quantitative methods;
2. a special issue that has changed over time (2019: Data Science and Data scientists in Humanities and Social Sciences);
3. several lab-sessions dedicated to computer-aided analysis of textual data.

### **Objectives**

Teaching activities at the School will raise questions that can be answered thanks to quantitative methods implemented within a text analysis framework and other procedures that may be used to identify and compare text characteristics. The aim is to discuss the strengths, weaknesses, opportunities and threats of quantitative methods for text analysis with postgraduate students, early career researchers and scholars of different disciplines. The Summer School aims at:

1. sharing information on software, corpora, relevant literature and research results;
2. promoting a dialogue among different disciplines on emerging research issues;
3. developing innovative analytical tools and integrated research methods;
4. introducing postgraduate students and early career researchers to new strains of research and applications;
5. sharing state-of-the-art techniques in digital methods for text analysis (topic detection, text classification, data visualization).

### **Does this School fit your needs?**

Would you like to take into account a large number of relevant novels, articles published by newspapers, transcriptions of open-ended interviews, or comments posted on social media in your research? Are there definitely too many texts for any scholar to read them in a life span?

Why not trying to ask a computer to do this task?

A software package is not able to "close read" a text. On the contrary, by means of mathematical and statistical tools, it might be smart to "distant read" a text (i.e. collecting data, retrieving relevant information, summarizing features, finding patterns, etc.). Instead of close-reading a limited number of texts, why not working with thousands of texts, upload them into the memory of a computer and ask a software package to produce analyses and results?

### **Credits**

The IQLA-GIAT Summer School in Quantitative Analysis of Textual Data is organized by GIAT – Interdisciplinary Text Analysis Group ([www.giat.org](http://www.giat.org)) in collaboration with the International Quantitative Linguistics Association ([www.iqla.org](http://www.iqla.org)).

The IQLA-GIAT Summer School is a project funded by the University of Padova ([www.unipd.it](http://www.unipd.it)) and coordinated by Professor Arjuna Tuzzi (University of Padova).

### **Application and deadlines**

The IQLA-GIAT Summer School is open to **20 participants** including researchers, scholars and postgraduate students. The selection of 20 participants is due to the capacity of the laboratory room.

Applicants should send a file in pdf format including:

1. curriculum vitae;
2. personal mission statement and research interests (max 500 words);

Applications should be sent to the following address: [qatd.school@fisppa.it](mailto:qatd.school@fisppa.it)

**Deadline June, 27th**

**Tuition fee 250 €**

### **Schedule**

The IQLA-GIAT Summer School will take place from Monday 9th to Friday 13th September 2019.

The IQLA-GIAT Summer School is a full-time intensive course held:

- On Monday from 10:00 am to 6:00 pm
- From Tuesday to Thursday from 9:30 am to 6:00 pm
- On Friday from 9:30 am to 4:00 pm

On Friday, the last two hours will be left for the final assessment.

### **Location**

University of Padova  
Department of Philosophy, Sociology, Education & Applied Psychology  
(Dipartimento di Filosofia, Sociologia, Pedagogia e Psicologia Applicata - FISPPA)  
Sociology buildings  
via Cesarotti, 10/12  
35123 Padova, ITALY

## **Classes**

All courses are in English. Teaching activities include lectures and lab sessions, as well as tutorials illustrating software tools.

The teaching staff includes researchers and experts from different Universities and Research institutes:

- Dominique Brunato (ILC / CNR of Pisa, Italy)
- Sascha Diwersy (Université Paul Valéry – Montpellier, France)
- Maciej Eder (Univ. of Kraków, Poland)
- George Mikros (National and Kapodistrian University of Athens, Greece)
- Stefano Ondelli (Univ. of Trieste, Italy)
- Pierre Ratinaud (Univ. of Toulouse II, France)
- Jan Rybicki (Jagiellonian Univ. of Kraków, Poland)

## **Topics**

- Computational stylistics
- Stylometry
- Texts and gender
- Topic modelling
- Text classification
- Forensic linguistics
- Author profiling and authorship attribution methods

## **Final Evaluation and self-assessment**

All participants will be requested to complete an evaluation questionnaire to express their opinions about the main aspects of the IQLA-GIAT Summer School (e.g. organization, teaching, materials, facilities and equipment, expectations, satisfaction rate, suggestions etc. ). It is worth mentioning that the fourth edition of the Summer School is organized also considering the results and suggestions obtained through the evaluation questionnaires done in 2013, 2015 and 2017 editions.

All participants will complete a self-assessment questionnaire on technical skills and general knowledge including 30 multiple choice questions (one correct answer out of four). Grades will reflect the sum of all correct answers (one point) according to the following range: A (29-30 points); B (25-28 points); C (21-24 points); D (17-20 points); E (15-16 points).

## **Website and social networks**

The IQLA-GIAT Summer School will provide a specific website within GIAT's domain ([www.giat.org](http://www.giat.org)) for the distribution of learning resources, links and bibliographic references before, during and after the Summer School.

The IQLA-GIAT Summer School is also active on Facebook and Twitter.

## **Info**

For any further information and details about terms, deadlines, application forms and payment methods, please contact:

**qatd.school@fisppa.it**