







IQLA-GIAT Summer School in Quantitative Analysis of Textual Data University of Padova, 4-8 September 2017

# CALL FOR APPLICATIONS

In your next research project, are you planning to take into account a large number of novels, newspaper articles, transcriptions of open-ended interviews, or comments posted on social media?

Are there definitely too many texts for any scholar to read in a life-span perspective?

Why not trying to ask a computer to do this for you?

A software package cannot "close read" a text. On the contrary, by means of mathematical and statistical tools, it might be smart enough 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, uploading them into the memory of a computer and asking a software package to produce analyses and results?

# Presentation

Digital methods have been utilised by a variety of disciplines and the growing availability of large corpora and large databases (the BIG DATA era) calls for new methods to deal with new problems, open the door to new questions and develop new knowledge.

"Quantitative analysis of textual data", "Digital Methods" and "Distant Reading" are general terms that refer to a wide range of methods sharing a common aim: retrieving and summarising 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 and it 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 quantitative 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 (e.g. electronic dictionaries, artificial intelligence, computer-aided translation, plagiarism detection, web reputation).

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

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

- 1. a general part devoted to quantitative linguistics;
- 2. a special issue addressing a relevant methodological problem (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. several lab-sessions dedicated to computer-aided analysis of textual data.

This year's IQLA-GIAT Summer School will also include a Workshop on Elena Ferrante's case-study.

# Objectives

Teaching activities will raise questions that can be answered by implementing quantitative methods and other procedures that may be used to identify and compare the characteristics of texts within a text analysis framework. The aim is to discuss with students, young researchers and scholars of different disciplines the strengths, weaknesses, opportunities and threats of text analysis quantitative methods. The participants selected for the IQLA-GIAT Summer School have the opportunity to exploit different tools within the same environment and the same tool in different environments.

The IQLA-GIAT Summer School aims at:

- 1. sharing information on software, corpora, relevant literature and research results;
- 2. promoting a dialogue among different disciplines on current research issues;
- 3. developing innovative analytical tools and integrated research methods;
- 4. introducing students and young researchers to new strains of research and applications;
- 5. sharing state-of-the-art knowledge in:
  - Quantitative linguistics;
  - Digital methods for text analysis (topic detection, text classification);
  - Authorship Attribution methods and dedicated software packages;
  - Content mapping and data visualization;
  - Computer-aided analysis of textual data.

## Credits

The IQLA-GIAT Summer School in Quantitative Analysis of Textual Data is organized by GIAT – Interdisciplinary Text Analysis Group (<u>www.giat.org</u>) in collaboration with the International Quantitative Linguistics Association (<u>www.iqla.org</u>) and the Department of Computational Linguistics (Computerlinguistik und Digital Humanities) of the University of Trier (<u>www.uni-trier.de</u>).

The IQLA-GIAT Summer School is a project funded by the University of Padova (<u>www.unipd.it</u>), coordinated by prof. <u>Arjuna Tuzzi</u> (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:

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

Applications should be sent to the following address: gatd.school@fisppa.it

Deadline: July, 31st

Tuition fee: €200

#### Location

University of Padua 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

# Schedule

The IQLA-GIAT Summer School will take place from Monday 4th to Friday 8th September 2017.

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 devoted to the final assessment.

## 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: Duquesne University (Pennsylvania, US); Toulouse II (France), Trier (Germany), Athens (Greece), Neuchatel (Switzerland), Kraców (Poland), Roma "La Sapienza", Padova and Trieste (Italy).

# Lecturers and topics

- 1. Andrei Beliankou (Univ. of Trier, Germany)
  - Quantitative Linguistics
- 2. **Maciej Eder** (Univ. of Kraków, Poland)
  - Topic detection and text classification
- 3. Patrick Juola (Duquesne University, Pittsburgh, Pennsylvania)
  - Authorship Attribution (JGAAP)
- 4. **Reinhard Köhler** (Univ. of Trier, Germany)
  - Quantitative Linguistics
- 5. Vittorio Loreto (Università di Roma "La Sapienza")
  - Authorship Attribution (compressors, entropy methods)
- 6. George Mikros (National and Kapodistrian University of Athens, Greece)
  - Authorship Attribution and profiling
- 7. Sven Naumann (Univ. of Trier, Germany)
  - Quantitative Linguistics
- 8. Stefano Ondelli (Univ. of Trieste, Italy)
  - Quantitative Linguistics
- 9. Pierre Ratinaud (Univ. of Toulouse II, France)
  - Topic detection and text classification (Iramuteq)
- 10. Jan Ribicki (Univ. of Kraków, Poland)
  - Authorship Attribution (stylo)
- 11. Jacques Savoy (Univ. of Neuchâtel Switzerland)
  - Authorship Attribution (measures of similarity)

#### **Other activities:**

## Valentina Rizzoli, Irene Saonara, Stefano Sbalchiero

- Quality Assessment of the School
- Final Evaluation and self-assessment
- Free Lab time
- Tutorship

## Final Evaluation and self-assessment

- 1. All participants will be requested to fill in a 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 third edition of the Summer School is organized also considering the results and suggestions obtained through the evaluation questionnaires done in 2013 and 2015 editions.
- All participants shall 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

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

#### Info

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

#### qatd.school@fisppa.it

Dott.ssa Valentina Rizzoli Dott.ssa Irene Saonara Dott. Stefano Sbalchiero