

Post-doc position (100%) at the Institute of Argumentation, Linguistics and Semiotics, Faculty of Communication, Culture and Society, USI Università della Svizzera italiana

Università della Svizzera italiana (USI) is a young and lively university, a hub of opportunity open to the world where students are offered a quality interdisciplinary education in which they can be fully engaged and take center stage, and where our researchers can count on having the space to freely pursue their initiative. Established in 1996, USI is in constant evolution, always taking on new challenges while remaining true to its three guiding principles: quality, openness and responsibility. See USI in university rankings:

<https://www.usi.ch/en/university/who-we-are/facts-and-figures/rankings>

The Institute of Argumentation, Linguistics and Semiotics (IALS) represents a lively research environment for conducting research in argumentation studies. Interaction with several researchers specializing on argumentation in different contexts, as well as interdisciplinary interactions with colleagues inside and outside USI is an asset for a scholar working in argumentation studies.

The Institute invites applications for a Post-doc position (100%, 3 years) supported by the NSF project ***Mining argumentative patterns in context. A large-scale corpus study of Earnings Conference Calls of listed companies*** and by the PhD Program in Applied Linguistics ***Managing languages, arguments and narratives in the datafied society***.

The research project and the doctoral program

The NSF project *Mining argumentative patterns in context. A large-scale corpus study of Earnings Conference Calls of listed companies* is a large-scale study of *argumentative patterns* in a corpus of quarterly Earnings Conference Calls (ECCs), a key dialogical genre in the financial communication of listed companies. In order to grasp the argumentative dynamics of this dialogical genre on a large scale, the project seeks to develop computational Argumentation Mining techniques, which allow to automatically extract the structure of the reasoning expressed by the participants in the discussion.

During earnings conference calls, managers discuss the financial results of the company and present their future outlook, facing questions from financial analysts, aimed at examining both the valuation of the company and the credibility of the managers. It is widely recognized that what happens at earnings conference calls can have a significant impact on financial markets. The research examines the hypothesis is that the effects of these events depend, in large part, on the interactive arguments exchanged between managers and analysts.

A large corpus of earnings conference call transcripts is manually annotated at different levels of semantic, discursive and argumentative structure in order to single out significant recurring *argumentative patterns*, recognizable from genre-specific discourse moves, predictable dialogue structure and semantic indicators. Machine learning techniques will be progressively applied to the manually annotated corpus to develop fully automated pipeline for the recognition of patterns in earnings conference calls. Argumentation Analytics will be then used to examine pattern distribution in relation to financial market and corporate accounting data.

The main scientific partners of the project are the Institute of Argumentation, Linguistics and Semiotics at USI, CH (Prof. Andrea Rocci) and the ARG-Tech Centre for Argument Technology at the University of Dundee, UK (Prof. Chris Reed). Other partners providing their scientific expertise to the project include Prof. Emanuele Bajo (Department of Economics, University of Bologna), Prof. Katarzyna Budzynska (Laboratory of The New Ethos, Warsaw University of Technology), Dr. Rudi Palmieri (Department of Communication and Media, University of Liverpool), Dr. Daniele Puccinelli (Institute of Information Systems and Networking, SUPSI).

The doctoral program ***Managing languages, arguments and narratives in the datafied society*** is supported by Swissuniversities for the period 2021-2024 and based on a collaboration between the School of Applied Linguistics at the Zurich University of Applied Sciences (ZHAW) and the IALS institute at USI. Co-directors of the program are Prof. Daniel Perrin (ZHAW) and Prof. Andrea Rocci (USI). A detailed description of the doctoral program can be found here:

<https://www.zhaw.ch/en/linguistics/study/doctoral-programmes/doctoral-programme-2021-2024/>

Responsibilities

Research. The Post-doc researcher will play a key role in the research project, contributing to corpus annotation and curation, assisting the principal investigator (Prof. Andrea Rocci) in the mentoring of the Ph.D. students involved in the project, coordinating collaboration with project partners, and, in particular, with ARG-Tech at the University of Dundee. They are expected to pro-actively contribute to the theoretical and methodological development of the interdisciplinary research project according to their skills and specialization. They will collaborate with the other members of the project team in co-authoring papers for conference presentations and journal submissions *in all the different disciplinary fields* involved, acting as lead author for articles in their field of expertise. Starting from their second year at USI, they are also expected to proactively contribute to acquire competitive funds – individually and in collaboration with Prof. Rocci and other members of the institute.

Teaching and program coordination. The Post-doc researcher will coordinate the PhD Program in Lugano, in collaboration with the general program coordinator at ZHAW in Winterthur. They will contribute to the design of the teaching program, to the mentoring of the PhD students, to the scheduling and logistics of courses and to the managing of the extended national and international network of scholars involved in the PhD program.

The Post-doc is also expected to teach, according to their expertise and specializations, both in the PhD Program and in the master and bachelor courses offered by IALS, with particular reference to the ESIR master program (<https://www.usi.ch/en/education/master/investor-relations-financial-communication>). The yearly teaching load will be of 1.5 ECTS credits for the first year at USI, and of 3 ECTS afterwards, in line with the needs of the Institute and Faculty.

Profile of the candidate

Ideal candidates should satisfy the following requirements:

- A PhD title in Argumentation, Linguistics, Computer Science, Communication, Finance, Accounting or Economics, Rhetoric or related fields with a specialization in one or more of the following areas: argumentation mining, computational argumentation, argumentation theory, computational linguistics, sentiment analysis and opinion mining, financial text analysis, corpus linguistics, the large scale analysis of argumentation in context, quantitative and corpus based research on argumentation, the analysis of the discourse of accounting and finance, text-based and discursive approaches to financial communication and investor relations. Previous publications in any of these areas of expertise and evidence of previous funding acquired by the candidate will be considered as an important added value.
- Essential skills, aptitudes and personal qualities include:

- A proven aptitude for the fine-grained analysis of discourse and dialogue
- A keen interest for exploring the discourse of financial and accounting communication from the viewpoint of argumentation using qualitative and quantitative methods
- Good analytical skills, with the ability to process and collate complex information and manage data in a structured manner and with a high level of accuracy
- Good project management skills and the ability to schedule efficiently multiple collaborative activities
- Interest for teaching and mentoring students, especially at the Master and Ph.D. level. Previous experience will be considered as an added value.
- Being passionate about learning dialogically and able to collaborate within the project team, within the doctoral program, with colleagues at the IALS institute and the Faculty
- Knowledge or experience in one or more of these areas is highly desirable:
 - Knowledge of argumentation theories, models and analytical frameworks
 - Knowledge of the fundamentals of finance and accounting
 - Knowledge of current approaches in computational linguistics
 - Experience with corpus annotation and with working with large corpora
 - Experience with machine learning and natural language processing techniques
- Fluency in English is necessary. Some knowledge of Italian (at least at a basic level) is highly advantageous. Knowledge of another Swiss national language will be considered as an added value.
- Given the domain of application of the project, the Post-doc researcher is expected to work to acquire the necessary knowledge of Finance and Financial communication if not already possessed.

Contract terms

The position is full time (100%). Gross salary for the first year amounts to CHF 80'000.-. The position will be renewable for a second and a third year.

Workplace is USI Università della Svizzera italiana, located in Lugano, Switzerland. Availability to travel to other parts of Switzerland and abroad (for purposes of collaboration and research) is required.

Preferred starting date is **November 1st, 2021**. However, the position will be kept open until a suitable candidate has been found.

The Application

Applications should contain: (1) a letter in which the applicants describe their research interests and the motivation to apply to this specific position, (2) a complete CV, (3) copies of PhD diploma, (4) an electronic version of the PhD dissertation and, if available, a PDF of ONE other scientific publication. A support letter written by the PhD supervisor (or another Professor who knows the candidate well) is equally welcome.

Please send your application in electronic form or requests for further information to Prof. Andrea Rocci (andrea.rocci@usi.ch). **Applications received before September 30, 2021, will be given priority.** However, applications will be received until the position is filled.

As an institution that values diversity, USI particularly encourages applications from women and from all individuals from underrepresented groups.

Lugano, September 9, 2021