

PhD student positions in NLP at the Institute of Argumentation, Linguistics and Semiotics, Faculty of Communication, Culture and Society at 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.

The Institute of Argumentation, Linguistics and Semiotics (IALS) provides a lively research environment for PhD students that specialize in natural language processing (NLP). Interaction with several researchers working in NLP, Linguistics and Computer Science as well as interdisciplinary interactions with colleagues across and outside the faculties of Informatics (INF) and Communication, Culture and Society (COM) is an asset for PhD candidates that want to work on the computational modelling of language.

The Institute invites applications for two fully funded Ph.D. positions (4 years) in Natural Language Processing for conducting research in one of the following topics:

- NLP for cognitive modelling, for example research on the computational modelling of creative thinking, reasoning and argumentation.
- Diachronic study of language using computational models.
- NLP for mental health.
- Multilingual NLP (including low-resource languages).

The Ph.D. Positions

The doctoral students will be enrolled in the PhD programme in Communication Sciences or Computational Sciences/Informatics, depending on the students' background. The doctoral students will work under the scientific supervision of Prof. Lonneke van der Plas (<https://usi.to/bkks>) and have the opportunity to collaborate with members of her research group that are based at USI and the EPFL, as well as collaborators of the group that are based all over Switzerland, in the Netherlands, Germany, other parts of Europe and the US.

The PhD candidates will help develop the institute's research agenda. On the teaching side, they will work as teaching assistant in courses at either bachelor or master level, helping with the preparation of teaching materials and tutoring students. The PhD candidates are also asked to present papers at scientific conferences and produce publications for scientific journals.

Candidates' profile

Ideal candidates should satisfy the following requirements:

- A Master (or equivalent title) in Natural Language Processing, Computational Linguistics, Computer Science or related disciplines
- Essential skills, aptitudes and personal qualities include:
 - Expertise in the computational modelling of language
 - Expertise in machine learning
 - Excellent programming skills
 - Excellent analytical and creative thinking skills
 - Good skills in oral and written English (official language of the Ph.D. program)
 - Interest in teaching and tutoring students
- Knowledge or experience in one or more of these areas is highly desirable:
 - Personal interest in cross-disciplinary work
 - 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.

Contract terms

Admission to the Ph.D. program is highly competitive. Admission decisions are based on the candidate's background, interests, attitude and potential for academic achievement. Successful enrolment in the Ph.D. program and the position as doctoral researcher are not compatible with a further professional activity.

The positions are fully financed and the salary levels correspond to those set by the Swiss National Science Foundation for PhD researchers.

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.

Starting date is 01.09.2025 (at the earliest). However, the position will be kept open until a suitable candidate has been found.

The Application

Applications may be submitted upon acceptance of the Applicant Personal Data Processing Notice found at the following **LINK**. In the online form, you will be asked to declare that you have read and understood our privacy policy.

Applications should contain: (1) a letter in which the applicants describe their research interests (including a short description of a thesis topic of interest) and the motivation to apply, (2) a complete CV, (3) copies of relevant diplomas, certificates as well as the full transcript of records that prove the candidates' eligibility for doctoral studies in Computational Linguistics, (4) an electronic version of a research work (Master thesis or other scientific publication). The latter must be accompanied by a short summary in English (1 page maximum). A support letter written by the Master thesis supervisor (or another tutor who knows the candidate well) is equally welcome.

Applications must be submitted **ONLINE** by filling out the form accessible through the following link: **APPLY**. You will also need to upload the documents listed above.

Requests for further information to Prof. Lonneke van der Plas (lonneke.vanderplas@usi.ch).

Applications received before 15.06.2025, will be given priority. However, applications will be received until the position is filled.

USI strives to be an equal opportunity and family friendly employer and is further responsive to the needs of dual career couples. We guarantee that the selection process will give equal opportunities to female and male researchers.

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

Lugano, 27.05.2025