

# PhD Position in Computer Science (University Assistant)

40 hours/week | limited for 4 years

Founded in 1815, TU Wien is Austria's premier research institution in the fields of technology and natural sciences. Its computer science department is ranked in the top 15 in Europe (first in Austria), and Vienna is considered one of the world's most livable cities.

The Department of Informatics at TU Wien is offering a PhD position, located in the Data Science Research Unit. The primary advisor will be Professor [Alexander Hoyle](#) (the person writing this call), although collaborations with other researchers are encouraged, particularly those with expertise in areas outside computer science.

The broad research focus of this group is natural language processing, with an eye toward applications in the social sciences. However, there is no fixed topic for this position. Intellectual curiosity and dedication are the most important criteria.

The appointment is for 40 hours/week, paying roughly EUR 52,000/year before tax, making it among the most generous PhD salaries anywhere (particularly when accounting for Vienna's relative affordability).

You will be among the first members of a new lab, and so will play an important role in developing its culture and direction! (While this may seem intimidating, the first students of an advisor are often their most successful 😊).

The start date is between July and November 2026, with a duration of four years.

**International / non-EU candidates are encouraged to apply!** TU Wien will assist you with visa requirements.

## Application procedure:

Submit copies of your transcripts (master's and bachelor's), CV, and diplomas to the portal.

You also should provide a statement of purpose of about one to two pages. The goal of this document is for me to understand your interests, thinking, and writing style; as a result, do not use LLM assistance for ideation or any substantial writing (minimal grammar checks are fine---as a rule of thumb, no more than 2% of the words should be AI-produced). I am not looking for perfect prose, just clarity of thought.

In case you need some guidance, a good structure is: a paragraph of your goals and research interests, one to two paragraphs of relevant experience, a paragraph about some initial directions/ideas (e.g., building on a paper you liked), and a paragraph about fit with the "group" (i.e., me). However, this format isn't strict: if you already have written something you're happy with, you can submit that. In addition, you are not bound to follow any of the ideas you propose there.

If you have GRE scores, feel free to submit them, but they are not remotely a requirement. Similarly, you are free to submit TOEFL results.

[Added later because I forgot to include it originally]: Provide at least one reference, ideally someone who can speak to your research ability (since it's not always obvious who to pick, generally it's better to list someone with whom you've worked closely than a well-known professor whose class you took but who barely knows you). If they can provide a real letter of recommendation that is great, if they can just write me an email saying you're not a dud that's fine too.

*If you have already been accepted to another PhD program, please make this clear in your application (e.g., include the acceptance email).*

Shortlisted candidates will receive a brief exercise and a zoom interview.

Questions can be directed to me, Alexander Hoyle, [alexander.hoyle+tu@ai.ethz.ch](mailto:alexander.hoyle+tu@ai.ethz.ch) .

## Your Profile:

### Academic background

- A master's in a relevant field (see below). If you do not have a master's but working with this group interests you, you can enroll in the master's program at TU and conduct your master's thesis with us.
- Either the bachelor's or master's degree should be in computer science/informatics, data science, human-computer interaction, computational social science, machine learning, statistics, computational linguistics, or related disciplines.

### Research and domain-knowledge

- Ideally, knowledge of natural language processing (including large language models), machine learning, experimental design, and statistical analysis (linear regression, significance testing, etc.). Some gaps are acceptable, but you should have a willingness to learn.
- Additional knowledge of a social science discipline and methodologies is also appreciated, but at a minimum you should have an *interest*.
- Some prior research experience is beneficial (e.g., a thesis, or some months working with a lab). Existing publication(s) in top machine learning or natural language processing conferences are terrific, *but not at all a requirement*.

### Technical skills

- Very good skills in English communication and writing.
- Knowledge of German (level B2) or willingness to learn it. However, this language is *pro forma*: there is no German language requirement to graduate.
- Python knowledge is strongly preferred, experience with agentic coding is also a plus.

### General traits

- You should be someone who takes initiative. While a PhD is primarily a learning experience, you should be striving for eventual independence and autonomy.
- Perhaps it goes without saying, but you should want to do research in this field and be a participant in both the local and global academic community.
- Curious about the world and self-motivated.

I took the following text directly from Anthropic's job postings because I think it is important to emphasize: **You are encouraged to apply even if you do not believe you meet every single qualification**, and not all strong candidates will meet every single qualification as listed. Research shows that people who identify as being from underrepresented groups are more prone to experiencing imposter syndrome and doubting the strength of their candidacy, so we urge you not to exclude yourself prematurely and to submit an application if you're interested in position.

## Your Tasks:

- Conducting research is your main priority, with the aim of publishing in premier conferences and journals in NLP, ML, and/or strong interdisciplinary venues.
- Teaching activities. Typically, this involves running lab sessions (exercises), although can also include assisting with lectures, examinations, thesis supervision, and grading. These tasks occupy an average of 4 hours/week during the semester.
- Mentoring, guiding, and collaborating with students at all levels.
- Contributing to funding proposals.
- Participating in---and later, contributing to---scientific events like conferences, workshops, etc.

- Writing a dissertation
- Assisting with organizational and administrative tasks related to research and teaching. This work will be kept to a minimum.

**We Offer:**

- The opportunity to do a well-paid PhD in a city consistently ranked as having the highest quality of life in the world.
- A range of nice social benefits (see [Fringe-Benefits](#)), in addition to those afforded by a country with generous social services.
- Ample access to computing resources (GPUs, etc.) both within TU Wien (DataLab) and with Austrian Scientific Computing, which includes the new MUSICA supercomputing cluster with hundreds of H100 GPUs.
- Internal and external training opportunities, various career options
- Central location of workplace as well as good accessibility (U1/U2/U4 Karlsplatz)