

The University of Vienna (20 faculties and centres, 184 fields of study, approx. 10.400 members of staff, about 90.000 students) seeks to fill the position from 01.05.2023 (or later) of a

Scientific project staff at the Research Group Data Mining and Machine Learning at the Faculty of Computer Science, University of Vienna under the supervision of Prof. Nils Kriege

Reference number: „#03 PC4-23: DMML Prof. Kriege“

The Faculty of Computer Science of the University of Vienna has world-leading researchers in Computer Science who pursue basic as well as applied research. The [UniVie Doctoral School Computer Science \(DoCS\)](#) builds an essential framework to foster excellence in research and teaching. Its main focus is on young prospective researchers eager to make an impact on both basic research as well as applied problems with collaborations across the University and beyond. The DoCS aims to provide these young researchers with the broad knowledge and expertise needed to perform Computer Science research at the highest achievable quality. The Doctoral School trains doctoral candidates in solving basic as well as applied research questions of high relevance.

The work group *Machine Learning with Graphs* is looking for highly motivated PhD students. We address problems at the intersection of machine learning, graph theory, and algorithmics. Our group offers an excellent working environment in a young, creative and international team. You will contribute to answering fundamental research questions in machine learning with graphs offering the possibility to publish at leading international conferences and to exchange ideas with international and interdisciplinary cooperation partners.

<https://dm.cs.univie.ac.at/mlg/>

You will be working on the project *Structured Data Learning with General Similarities*, funded by the WWTF.

Duration of employment: 4 years (The employment contract is initially limited to 1.5 years with the possibility of extension to 4 years.)

Extent of employment: 30.0 hours/week

Job grading in accordance with collective bargaining agreement: §48 VwGr. B1 Grundstufe (praedoc) with relevant work experience determining the assignment to a particular salary grade.

Job description

Participation in research and administration:

- Participation in research projects/research studies
- Participation in publications/academic articles/presentations
- We expect the successful candidate to sign a doctoral thesis agreement within 12-18 months.
- Involvement in the organisation of meetings, conferences, symposiums
- Involvement in the department administration as well as in teaching and research administration

The research is carried out in the project *Structured Data Learning with General Similarities* led by Prof. Nils Kriege, Prof. Thomas Gärtner (TU Wien), and Prof. Christoph Flamm

(University of Vienna). We aim at pushing the boundaries of similarity-based learning for structure data by (i) designing and analysing general similarities for structured data, (ii) developing learning algorithms for general similarities, and (iii) applying combinations of these for concrete problems in cheminformatics. The focus of your position will be on developing and analysing new similarity measures for structured data such as strings, trees and graphs.

Profile

- Strong background in theoretical computer science, (discrete) mathematics, and machine learning
- Knowledge on graph theory
- Implementation and programming skills
- High ability to express yourself both orally and in writing
- Excellent command of written and spoken English
- Ability to work in a team

Desirable qualifications are

- Knowledge in cheminformatics or pharmaceutical chemistry
- Basic experience in research methods and academic writing

Application documents

- Curriculum vitae
- Letter of Motivation including ideas for a prospective doctoral project proposal
- Abstract of master thesis
- Degree certificates and transcripts of records
- List of publications, evidence of teaching experience (if available)

For further information please contact Prof. Nils Kriege (nils.kriege@univie.ac.at).

Applications should be submitted via the recruiting tool [Apply@DoCS | Servicedesk Universität Wien \(univie.ac.at\)](#), mentioning reference number „#03 PC4-23: DMML Prof. Kriege“. Further details are available here (also how you set up an u:account): <https://docs.univie.ac.at/apply>.

The University pursues a non-discriminatory employment policy and values equal opportunities, as well as diversity (<http://diversity.univie.ac.at/>). The University lays special emphasis on increasing the number of women in senior and academic positions. Given equal qualifications, preference will be given to female applicants.

The candidate who is selected for this position joins the DoCS as a doctoral student member.