The University of Vienna (20 faculties and centres, 179 fields of study, approx. 10,000 members of staff, about 90,000 students) seeks to fill the position from 01.02.2022 (tentatively) of a

**University Assistant (prae doc)**

at the Research Group Theory and Applications of Algorithms
at the Faculty of Computer Science, University of Vienna
under the supervision of Prof. Wilfried Gansterer

**Reference number:** “#10 PC2: Theory and Applications of Algorithms, Prof. Gansterer”

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 are 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.

This position is in the team of Prof. Wilfried Gansterer within the research group Theory and Application of Algorithms of the Faculty of Computer Science. The successful candidate will pursue research on numerical high performance algorithms with a particular focus on aspects related to scalability, parallelization/distributed computation or resiliency (potentially including questions arising in computational and data science).

We offer a pleasant working atmosphere in a dynamic, young team with a variety of professional and personal development opportunities. More information about us can be found at [https://taa.cs.univie.ac.at/](https://taa.cs.univie.ac.at/) To receive full consideration, applications must include all application documents listed below.

**Duration of employment:** 4 years (The announcement is made for four years, whereby the employment relationship is initially limited to 1.5 years and is automatically extended to a total of four years, unless the employer submits a declaration of non-renewal after a maximum of 12 months.)

**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, teaching 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.
- Participation in teaching and independent teaching of courses as defined by the collective agreement
- Supervision of students
- Involvement in the organisation of meetings, conferences, symposiums
Involvement in the department administration as well as in teaching and research administration. The research should focus on challenges in numerical high performance algorithms, such as scalability, large-scale parallelization or resiliency.

Profile
- You have a strong background in numerical computing and in numerical algorithms. Of particular interest are algorithms for solving large linear systems or large eigenvalue problems.
- You have strong implementation and programming skills.
- You have high ability to express yourself both orally and in writing.
- You have excellent command of written and spoken English.
- You are able and willing to cooperate and to work in a team.

Desirable qualifications are
- Documented experience and background in High Performance Computing, Scientific and Numerical Computing
- Programming experience in C or C++ or modern Fortran
- Experience with parallel programming in MPI
- Knowledge of communication-avoiding numerical algorithms
- Experience with numerical software libraries
- Basic experience in research methods and academic writing
- Knowledge of university processes and structures

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

For further information please contact Prof. Wilfried Gansterer +43 1 4277 78311.

Applications should be submitted via the recruiting tool Apply@DoCS | Servicedesk Universität Wien (univie.ac.at), no later than 20.12.2021, mentioning reference number “#10 PC2: Theory and Applications of Algorithms, Prof. Gansterer”.

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 in academic positions. Given equal qualifications, preference will be given to female applicants.

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