Paris Lodron University Salzburg
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Join our interdisciplinary team to investigate fairness of recommender systems in the music sector or a related field in the media sector.

As part of the 'Excellence in Digital Sciences and Interdisciplinary Technologies' (EXDIGIT) initiative, funded by the State of Salzburg, the Paris Lodron University Salzburg, Austria, is seeking to appoint a

doctoral researcher (f/m/d; 30 hours/week; 4 years)

as a scientific project employee.

The successful candidate will execute research in close collaboration with Christine Bauer, Professor of Interactive Intelligent Systems. In doing so, the candidate will work within the wider framework of the EXDIGIT Research College and existing research groups within the Faculty of Digital and Analytical Sciences of the Paris Lodron University Salzburg and Salzburg Research.

Candidates are expected to integrate well into a genuinely interdisciplinary research setting and demonstrate a strong interest in **recommender systems**. We seek candidates with strong foundation in computational methods, as they apply to recommender systems research, who are equally motivated to incorporate human-centered insights into their work. Ideally, they will focus on **fairness in recommender systems** in the music sector or a related field in the media sector.

Research
Recommender systems are used across a variety of applications, including news, e-commerce, advertising, and entertainment. While recommender systems have become deeply embedded in our digital lives, their impact on the multiple stakeholders remains largely unexplored. **Fairness** is one of the core challenges in this field.
Although fairness is a universal issue, there are domain-specific particularities that need to be taken into consideration. As the prospective candidate of this PhD position, you will focus on the music sector or a related field in the media sector (e.g., books, news).

You will investigate the **role of recommender systems in promoting equal opportunities** in the selected sector. As investigating biases and inequalities requires a broad methodological approach, you will further develop your skills in a range methods and apply them in your research. These methods may include machine learning approaches (as applied in recommender systems research), computational approaches for the analysis of large datasets, and user-centered approaches (e.g., questionnaires or lab studies).

Qualifications
We are looking for a candidate that meets the following profile:

- a background in Data Science, Artificial Intelligence, Computer Science, Information Science, Computational Social Sciences, Human-Computer Interaction, or a related field;
- a strong foundation in machine learning, data science, and computational approaches as applied to recommender systems, with knowledge of common practices in machine learning and recommender systems such as evaluation methods;
- interest and willingness to engage with human-centered research methods (e.g., questionnaires, lab studies);
- a keen interest in conducting interdisciplinary research;
- strong programming skills (as needed for, e.g., offline evaluation);
- an interest in data science;
- good communicative skills in English, both in writing and speech;
- a strong interest in recommender systems;
- an interest in the music sector or a related field in media is a plus.

The successful candidate is expected to publish research results at scientific conferences and in journals, help organizing scientific events, and contribute to acquiring third-party funding. Teaching responsibilities may be arranged separately.

For further information, please contact Univ.-Prof. Mag. DI Dr. Christine Bauer (christine.bauer@plus.ac.at).

According to the Collective Agreement for University Employees, the successful candidate will be allocated to Employment Group B1 (EUR 2,684.10 gross for 30 hours/week; monthly salary, paid 14 times a year).

Applications should be written in English and include the following documents: cover letter describing your motivation, a CV, the Master thesis or equivalent, a list of publications (*if existent*), a brief description of your envisaged research, and contact details of *up to* three references. Please submit all documents as PDF files to pmo.exdigit@plus.ac.at (subject: 'Application EXDIGIT/Bauer/PhD'). **Review of applications will begin 16 December 2024** and will continue until the position is filled.

Paris Lodron University Salzburg is committed to equity, diversity, and inclusion. All qualified applicants will receive consideration for employment without regard to gender, ethnicity, religion, or sexual orientation, disability, or age. Persons with disabilities or chronic illnesses who meet the required qualification criteria are strongly encouraged to apply. For information, please call +43/662/8044-2462 or write to disability@plus.ac.at.