

Call for Candidates: Post Docs and PhDs in EXDIGIT

Paris Lodron University Salzburg

PLUS. Competence for tomorrow.

Paris Lodron University Salzburg (PLUS) is firmly rooted in the regional and national research landscape while also being well-connected internationally. It embraces the task of analyzing and comprehending complex topics of our time, thus contributing to the development of sustainable solutions for present and future challenges and taking responsibility for our society. Interdisciplinary and transdisciplinary networking characterizes PLUS, driven particularly by the four guiding themes: *Art in Context*, *Development and Sustainability*, *Digital Life*, and *Health and Mind*. As a result, PLUS creates an excellent environment for research personalities to flourish and fosters creative spaces where educators and students can collaboratively conceive and pursue ideas.

At the Paris Lodron University Salzburg, **positions for doctoral candidates and postdocs** (scientific project employees) are available as part of the "**Excellence in Digital Sciences and Interdisciplinary Technologies**" (EXDIGIT) initiative, funded by the State of Salzburg. These positions are within the framework of the EXDIGIT Research College. In close collaboration with three associated EXDIGIT professorships and existing departments, the research activities of the Research College aim to complement the existing research groups at PLUS and the [Salzburg Research](#) Institute, particularly within the [Faculty of Digital & Analytical Sciences](#). The focus is on applied research or application-oriented basic research, with a particular emphasis on bridging the existing areas and represented disciplines. The goal is to generate innovative impulses that contribute significantly to the sustainable development of interdisciplinary intersections of digital scientific topics and strengthen the location and orientation of the faculty.

We are looking for individuals who have expertise in at least one of the following research fields as part of their previous career or have completed their studies in a related field and demonstrate potential for sustainable, innovative, and interdisciplinary collaboration:

- **Interactive Intelligent Systems**, particularly in the areas of Recommender Systems; Fairness and Trustworthiness; Human-Centered AI
- **Human-Computer Interaction**, particularly in the areas of Psychological Foundations; Hybrid and Smart Interaction and Materials; (Art Based) Design Research on Emerging Technologies; Interactions with Autonomous Systems; Sociotechnical Perspectives
- **Geoinformatics & Visualization**, particularly in the areas of (Big) Spatial Data Analytics; Space and Place Concepts and Applications; Digital Earth; Real-Time Data Presentation and Interaction; Remote Sensing Data Security and Reliability; Smart Mobility
- **Data Science & Data Intelligence**, particularly in the areas of Prescriptive Analytics; Nonparametric Statistics, Stochastics, Dependence Modelling; Machine Learning; Computer Vision; Biomedical Image- and Signal Analysis; Data and AI Ethics; Motion Data Intelligence; Data Management and Integration
- **Computational Modeling & Applied Mathematics**, particularly in the areas of Simulation; High Performance Computing; Optimization; Analysis and Numerics of PDE; Computational Methods in Number Theory and Combinatorics; Cryptography; Graph Mining; Algorithmic Decision Making; Computational Models for Social Phenomena; Digital Humanities Tools and Methods; Sustainable and Trustworthy Systems and/or Analytics

Conditions:

- Planned start of employment: from October 1, 2023
- Weekly working hours: 30 hours (PhD), 40 hours (Postdoc)
- Duration of employment: 4 years
- The monthly salary for this position is in accordance with §26 of the Collective Agreement for University Employees:
 - For PhDs: Employment group B1 – €2,458.00 gross monthly, 14 times a year (for 30 hours/week)
 - For Postdocs: Employment group B1 – €4,351.90 gross monthly, 14 times a year

Areas of responsibility:

- Contribution to the development and establishment of interdisciplinary bridges as part of the EXDIGIT Research College
- Conducting independent research within the project, with a particular focus on the preparation and publication of a dissertation for PhD candidates
- Publishing research results in scientific conferences and journals
- Participating in international conferences to present research findings and increase the visibility of EXDIGIT and the University of Salzburg in digital fields.
- Assistance in organizing and conducting scientific events, such as workshops or conferences
- Support in acquiring third-party funding and preparing further research proposals
- Support in preparing project reports and communication related to the project.

Additional areas of responsibility for Postdocs:

- Leading sub-projects and assuming responsibility in project organization as principal investigator (PI)
- Contribution to the advancement of research areas through close collaboration, innovative research approaches, and methods
- Establishment of networks with cooperation partners and experts in the non-university environment
- Teaching assignments to be agreed upon separately.

General requirements for employment include:

- Doctoral candidates:
Completion of a domestic or equivalent foreign university degree (Master's or Diploma) in one of the disciplines represented at the Faculty of Digital and Analytical Sciences (DAS) or at the Science City Itzling location, corresponding to the research orientation.
- Post Docs:
 - Completion of a domestic or equivalent foreign doctoral degree in a field related to one of the disciplines represented at the Faculty of Digital and Analytical Sciences or at the Science City Itzling location, corresponding to the intended position.
 - Desired additional qualifications: demonstrated expertise in at least one of the mentioned areas; visible scientific reputation; a profile that offers connections to research topics of the DAS faculty; experience in international research collaboration and in acquiring third-party funding.
- Excellent English language skills.
- Desired personal qualities: enthusiasm for interdisciplinary collaboration in a dynamic environment, teamwork, ability to work independently and take responsibility, determination, reliability.
- Application deadline: July 31, 2023.

The University of Salzburg aims to increase the proportion of women in its staff and therefore explicitly invites qualified female candidates to apply. In case of equal qualifications, women will be given priority. Individuals with disabilities or chronic illnesses who meet the required qualification criteria are explicitly encouraged to apply.

For further information, please contact Christoph Moosbauer by phone at +43 664 6082272204 or via email at christoph.moosbauer@plus.ac.at.

Applications should be addressed in English to the Rector of the University of Salzburg, Prof. Dr. med. Dr. h.c. Hendrik Lehnert, and preferably submitted using the application form: <https://forms.gle/dkyFNxn2LsvtUbhE8>, or alternatively by email to christoph.moosbauer@plus.ac.at, including the following documents:

- Cover letter outlining the motivation for scientific work in EXDIGIT, indicating the preferred research fields (see above).
- Detailed CV with certificates and a list of experience in the academic and scientific field (including a list of publications).
- Summary of the Master's thesis (doctoral candidates) or the PhD thesis (Post Docs).
- Indication of up to 3 potential references.
- A brief outline (maximum 2 pages) of an interdisciplinary research topic that addresses one of the mentioned fields and establishes connections to other areas and disciplines.