

As a central non-university institution for science and research, the Austrian Academy of Sciences - ÖAW has the task of "promoting science in every respect". Founded in 1847 as a learned society, it now has over 760 members and around 1,800 employees dedicated to innvative basic research, interdisciplinary knowledge exchange and the dissemination of new insights. The OeAW initiates and maintains partnerships worldwide and represents Austria in international scientific organizations; it cooperates with numerous institutions in the field of science in order to actively shape the research landscape.













# POSTDOC POSITION (F/M/X) in the area of Music Information Retrieval/Optical Music Recognition

Job ID: Job ID: ACDH-CH027PD125

At the Austrian Centre for Digital Humanities and Cultural Heritage (ACDH-CH), an institute of the Austrian Academy of Sciences (OeAW), Austria's largest non-university research institution, the Department of Musicology has a vacancy for an

POSTDOC POSITION (F/M/X) in the area of Music Information Retrieval/Optical Music Recognition zu besetzen.

(Full-time employee)

To be filled from June 1st, 2025 at the earliest and for a duration of 6 months.

At our department, we are seeking to strengthen our team for an innovative project in the field of digital music analysis and processing. With our interdisciplinary team of musicologists and digital humanists, we work at the interface between technology and musical cultural heritage.

### Ihr Aufgabenbereich

- Further development and optimisation of OMR models for recognising chant notation in digitised medieval manuscripts
- Development of solutions for the automatic merging of fragmented notation and text parts in chant books
- Implementation of algorithms for automatic verification and correction of studentcreated ground-truth data for music notation
- Development of methods for automatic identification of chants according to the CANTUS and CANTUS Index reference databases
- Design and implementation of a framework for intelligent post-processing of recognised data from the Transkribus environment
- Transformation of recognised music and text data into MEI format
- Optional: Development of methods for synchronising lyrics and notation at syllable level
- Documentation of developed methods and preparation of scientific publications
- Collaboration with an interdisciplinary team of musicologists, digital humanists and students

#### Ihr Profil

• Completed PhD in Computer Science or a related field with a focus on Music Information Retrieval, Optical Music Recognition or Document Image Analysis

- Demonstrated expertise in applying modern deep learning techniques (CNN, RNN, Transformer) to image transcription problems (OCR, HTR, OMR)
- Experience with machine learning frameworks such as PyTorch, TensorFlow, Keras, Scikit-learn, NumPy and Pandas
- Good programming skills in Python and preferably in TypeScript/JavaScript
- Experience in developing web applications with frameworks such as Node.js, Angular or Vue.js is an advantage
- Knowledge of DevOps technologies such as Docker and Kubernetes is desirable
- Papers at relevant conferences (ISMIR, ICDAR, ICFHR) and/or publications in specialist journals
- Very good command of English, both written and spoken; knowledge of German is an advantage
- High motivation, creativity and initiative as well as teamwork skills

#### **Unser Angebot**

- A PostDoc position in an innovative research field for 6 months
- The opportunity to participate in international collaborative projects
- A highly motivated, international research team
- Access to state-of-the-art technical infrastructure and extensive datasets
- Flexible working hours

The initial monthly gross salary is EUR 4.930,60 in accordance with the collective agreement for employees of the Austrian Academy of Sciences. Based on your experience and academic degree a higher salary is negotiable. The employment will start at the earliest in June 1st, 2025 and run initially for 6 months.

Interested? Take the opportunity and send us your application today (including CV, statement of motivation and references of previous projects) by clicking on "jetzt bewerben". The application deadline is 15.04.2025.

#### JETZT BEWERBEN

Die Österreichische Akademie der Wissenschaften (ÖAW) verfolgt eine diskriminierungsfreie Beschäftigungspolitik und legt Wert auf Chancengleichheit sowie Vielfalt. Insbesondere Personen aus unterrepräsentierten Gruppen werden ausdrücklich ermutigt, sich zu bewerben.

## Kontakt

Nicole Zehetmayer | Nicole.Zehetmayer@oeaw.ac.at

ACDH | 1010 Vienna, Austria

Österreichische Akademie der Wissenschaften | Austrian

Academy of Sciences | https://www.oeaw.ac.at/

