



ACERVOS DIGITAIS
ARTE ARQUITETURA DESIGN

Call for Applications

Postdoctoral Fellowship

The Thematic Project **Digital Collections and Research: Art, Architecture, Design and Technology** (Process No. 2022/05946-9), developed at the University of São Paulo (participating units: the Faculty of Architecture, Urbanism and Design – FAU-USP – and the Museum of Contemporary Art), in collaboration with researchers from FILE – the International Electronic Language Festival – and PUC-SP, and funded by FAPESP – São Paulo Research Foundation, is offering a postdoctoral fellowship for a PhD holder whose research focuses on information design applied to digital collections, making use of artificial intelligence resources.

The research will be carried out at the Faculty of Architecture, Urbanism and Design – FAU-USP, at the FAU-Maranhão campus, located at Rua Maranhão, 88 – São Paulo, SP, Brazil.

Postdoctoral Fellowship: The Aesthetics of Databases and Artificial Intelligence

Field of Knowledge: Design

FAPESP Process No.: 2022/05946-9

Project Title: Digital Collections and Research: Art, Architecture, Design, and Technology

Area of Activity: Languages and Technology

Number of Positions: 1

Duration: 20 months

Principal Investigator: Giselle Beiguelman

Unit/Institution: Faculty of Architecture, Urbanism and Design – FAU-USP

Application Deadline: April 02nd, 2026

Location: FAU-Maranhão – Rua Maranhão, 88 – São Paulo, SP, Brazil

Application E-mail: acervosdigitais@usp.br

Abstract

This postdoctoral research investigates the use of artificial intelligence resources in the production of data visualization systems, with the aim of opening new fields of scientific



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research in born-digital collections and contributing to system transparency in public access. To this end, the project seeks to systematize a theoretical repertoire related to the field of database aesthetics and to conduct a series of case studies in order to propose artificial intelligence functionalities aimed at optimizing the use of metadata associated with the archives cataloged in the database of this Thematic Project. Such metadata range from textual information—such as author name, file type, and date—to data related to layers of digital image files (such as color encoding, curves, and coordinates of the shapes of digital objects), as well as data generated in administrative routines, including loan records and the tracking of the circulation of these same objects on social media networks. Therefore, the project seeks candidates aligned with the field of Digital Humanities.

Expected outcomes include:

- a) conceptual contributions to the field of database aesthetics, through publications and participation in scientific events;
- b) the systematization of information design strategies to provide visual access to the collection and its data flows;
- c) the proposal and identification of possibilities for future research in the field of digital preservation;
- d) collaboration with the data transparency and accessibility goals of this Thematic Project;
- e) technological development related to interfaces for digital collections created within the scope of this Thematic Project.

Mandatory Requirements

- A doctoral degree obtained less than seven years ago in a field related to the project;
- Availability to begin research activities immediately;
- Previous publications related to the proposals of this project;
- Proven skills in MariaDB Vector; Vue.js 3; Node.js; Python; and JSON;
- Natural Language Processing (NLP) applied to digital collections;
- Implementation of data pipelines for automation using Artificial Intelligence models, embeddings (RAG), and Optical Character Recognition (OCR).
- Demonstrated knowledge in Aesthetics, Art History, Design, and/or Languages and Communication;
- The selected candidate must reside in São Paulo (SP) and be dedicated exclusively to research.

Desired Profile

- Hybrid expertise in the Humanities and Social Sciences and Information Technology, in order to mediate and facilitate the integration between the arts and programming.



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- Proven prior experience in research in the field of Digital Design and Digital Humanities, and in their intersections with the arts;
- Prior research experience with digital collections;
- Excellent oral and written communication skills;
- Skills in modeling relational databases with vector support and multi-tenant systems; implementation of interactive data visualization interfaces (such as D3.js); and proficiency in archival management metadata standards (such as e-ARQ Brasil) and archival description standards (such as NOBRADE);
- Desirable experience in integrating artificial intelligence systems with collection management platforms.

Activities to Be Carried Out

- Mapping and development of case studies on the uses and applications of Artificial Intelligence in data visualization systems in areas related to this Thematic Project;
- Development, supervision, and implementation of new functionalities for the interfaces and prototypes made available by the team, such as Meta-Collections (Meta-Acervos);
- Modeling of the databases for this Thematic Project, with emphasis on metadata indexing procedures;
- Publication and management of repositories and documentation of technological development processes, with emphasis on open-source systems;
- Organization of a graduate course dedicated to the theme of the postdoctoral project;
- Participation, with presentations of partial research results, in the Workshops and International Seminars organized by the Thematic Project team;
- Publication of two scientific articles;
- Participation in scientific events with publication in their proceedings;
- Preparation of the annual reports required by FAPESP;
- Participation in the regular meetings of the Thematic Project group.

Applications

Applicants interested in the selection process must submit the following documents, addressed to Prof. Dr. Giselle Beiguelman, by e-mail to acervosdigitais@usp.br, with the subject line: **“Postdoctoral Fellowship – Selection Process – [FULL NAME]”**:

- Curriculum Summary, in accordance with the model provided by FAPESP [\[link\]](#), emphasizing scientific production related to the scope of this Call;



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- Document certifying that the applicant holds a doctoral degree in a field related to this Call;
- A letter (maximum of 3 pages) stating the reasons for interest in the fellowship, including a brief account of the applicant's research experience in the field of digital collections;
- References to up to five recent publications and/or presentations (from the last three years) authored by the candidate that demonstrate mastery of the themes relevant to the scope of this Call.

The application deadline is April 2nd, 2026. Applications will be considered only if all documents are submitted no later than 11:59 p.m. on April 2nd, 2026 (Brasília time, UTC-3).

Evaluation Criteria

The evaluation of postdoctoral fellowship applications will consider the following aspects:

- The applicant's research record;
- With regard to the curriculum analysis, particular consideration will be given to the relevance of the candidate's technical and scientific production to the characteristics defined in the desired researcher profile outlined in this Call.
- Applicants may be invited to an in-person or online interview with the supervisor to assess the alignment of their areas of expertise with the research themes of the project.

The position is open to Brazilian and international applicants.

The implementation of the fellowship is subject to approval of the selected candidate by FAPESP. If approved by FAPESP, the selected candidate will receive a monthly stipend of BRL 12,570.00. A technical reserve equivalent to 10% of the annual fellowship amount will be provided to cover expenses directly related to the research activities of the Thematic Project. If the postdoctoral fellow resides in a different location and needs to relocate to the city where the host institution is located, they may be eligible for a relocation allowance. Further information on the FAPESP Postdoctoral Fellowship is available at www.fapesp.br/bolsas/pd.

The validity of this postdoctoral selection process is six (6) months. If the first selected candidate does not take up the position, the second-ranked candidate may be appointed.



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Schedule

- Applications and submission of documents by e-mail: until 11:59 p.m. on April 2nd, 2026
- Announcement of the selected candidate: by April 4th, 2026
- Confirmation of interest by the selected candidate: by April 5th, 2026
- Call of the second-ranked candidate, should the confirmation of interest not occur as specified above: by April 6th, 2026
- In the event of withdrawal by the fellow after the implementation of the fellowship, the next-ranked candidate will be invited.