

SEBASTIAN BARZAGHI

Research fellow

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Research fellow at the Department of Cultural Heritage of the University of Bologna. Graduated in 2020 from the Digital Humanities and Digital Knowledge (DHDK) master's program at the University of Bologna, I currently work at the FrameLAB research laboratory on various projects related to the application of Semantic Web methodologies and technologies. Specifically, my research interests focus on Linked Open Data publishing and modeling of methodological workflows.

EDUCATION

Graduated in Cultural Heritage Sciences (L-1) in 2017 from the University of Milan, I then obtained a master's degree in Digital Humanities and Digital Knowledge (LM-43) in 2020 from the Department of Classical Philology and Italian Studies at the University of Bologna, with a thesis on the development of an ontology for the conceptual modeling of medieval manuscripts (which I published as a [scientific article](#)). After work experiences both in research and in the private sector, in 2023 I took on the role of research fellow at the Department of Cultural Heritage of the University of Bologna, at the Ravenna campus.

Master's Degree in Digital Humanities and Digital Knowledge (DHDK)

Alma Mater Studiorum - University of Bologna

📅 December 2017 - March 2020

Bachelor's Degree in Cultural Heritage Sciences

University of Milan

📅 September 2014 - December 2017

WORK EXPERIENCE

Research Fellow

📅 03/2023 - Present

📍 UNIBO, Ravenna (RA)

Conducting research activities within the framework of the "CHANGES" project (PE5 of the PNRR). Specifically, the activities will focus on:

- "Virtual Technologies for Museums and Art Collections": Enhancing interaction with tangible and intangible cultural heritage objects in museums and art collections through the use of innovative virtual technologies;
- "History, Conservation, and Restoration of Cultural Heritage": Development of a common operational language (methodologies, standards, operational practices) among the stakeholders involved in various capacities in the processes of restoration, conservation, maintenance, and management of cultural heritage;
- Semantic modeling of data and metadata;
- Development of software for data processing, analysis, and conversion;
- Preparation of documentation, guidelines, slides, protocols, and their publication with a focus on Open Science and Open Access.

UX Designer

📅 12/2021 - 03/2023

📍 CINECA, Bologna (BO)

Conducting activities related to the support and design of large and complex portals and websites for universities and research institutions. Specifically, the activities involved:

- Collection, analysis, and formalization of requirements expressed by universities and institutions, in the initial design phase and for subsequent developments following the start of operation, also through direct comparison with stakeholders of universities/research institutions;
- Analysis of requirements related to the exposure on the Web Portal of contents and functionalities related to areas adjacent to Communication but strongly characterizing the university and research institution domain (Research, Teaching, Third Mission, Internationalization, etc.);
- Information architecture design;

- Content model and functioning model design;
- Editorial management model definition;
- Page design and wireframe development to support the design, graphic, and UX project;
- Support to the development team in the implementation phase of the portal and websites with respect to the collected requirements and the prepared design deliverables;
- Quality control activities and accessibility and usability checks;
- Preparation of documentation, web guidelines, and online help addressed to users of the editorial back office;
- Classroom training, in person and remotely, to the university/institutional team responsible for content management;
- Ordinary management of support requests opened by the university/institutional teams.

Research Fellow

National Edition of the Works of Aldo Moro

📅 06/2020 - 12/2021

📍 DHARC, Bologna (BO)

Conducted activities related to the design and development of a digital edition of Aldo Moro's works. Specifically, the activities involved:

- Data and metadata modeling to describe textual, contextual, and bibliographic information of the works;
- Definition of a series of reference models to base the design and development of the Edition through a comparative evaluation process based on content analysis and data processing;
- Support for the development of a web platform for semi-automatic text markup and metadata;
- Development of a series of Python scripts for data and metadata conversion into suitable formats for web publication (HTML-RDFa, RDF, XML-TEI);
- User experience design of the Edition's website (research, information architecture, wireframing, prototyping);
- Project management and documentation;
- Writing documentation, guidelines, protocols, and their publication from an Open Science and Open Access perspective;
- Supervision and training of interns for the web development of some pages of the Edition;
- Training researchers on the use of the platform for text markup and metadata;
- Supervision of thesis students as co-advisor.

Research Fellow

Digital Edition of the Letters of Vespasiano da Bisticci

📅 01/2020 - 03/2020

📍 DHARC, Bologna (BO)

Conducting activities related to the documentation and optimization of the digital edition of the Letters of Vespasiano da Bisticci. Specifically, the activities involved:

- Documentation of the conceptual model of the edition;
- Management, cleaning, and visualization of data;
- Support for the Web development of some pages of the Edition.

Intern

IRNERIO Project

📅 05/2019 - 09/2019

📍 CIRSIFID, Bologna (BO)

Conducting activities related to the digital catalog of medieval texts managed within the IRNERIO Project. Specifically, the activities involved:

- Analysis of data and metadata present in the digital catalog;
- Development of an ontology based on the conducted analysis and constant interaction with domain experts.

RESEARCH ACTIVITIES

- In 2023, I began collaborating on a series of projects at the research laboratory FrameLAB, including the digitalization process of works belonging to the exhibition "The Other Renaissance. Ulisse Aldrovandi and the Wonders of the World" and the formalization of protocols for the management and conservation of cultural heritage, within the context of the CHANGES project. Currently, my contributions include:

- Data modeling concerning the objects of the Aldrovandi exhibition and the process of acquiring 3D models;
- Designing a data management tool for risk and safeguarding of cultural heritage: <https://github.com/sebastianbarzaghi/sirius>
- Designing a semi-automatic semantic tagging tool for digital texts: <https://github.com/sebastianbarzaghi/ascaris>
- Between 2020 and the end of 2021, I carried out the research fellow activity funded by the National Edition of the Works of Aldo Moro project. The results are:
 - A digital platform with selective querying based on various intertextual and contextual elements of the works: <https://aldomorodigitale.unibo.it/>
 - The dataset containing the structural, intertextual, and contextual data of the Edition: <http://doi.org/10.5281/zenodo.5592157>
 - A series of controlled vocabularies used to model information related to the themes and typologies of Aldo Moro's works, and the roles assumed by Aldo Moro during his lifetime: <http://doi.org/10.5281/zenodo.5653547>, <http://doi.org/10.5281/zenodo.5653557>, <http://doi.org/10.5281/zenodo.5653608>
 - A collection of source codes used to process the Edition data: <http://doi.org/10.5281/zenodo.5592470>
 - A collection of source codes used to record the Digital Object Identifiers of the Edition works: <http://doi.org/10.5281/zenodo.5651219>
 - A document describing the data modeling process of the Edition: <http://doi.org/10.5281/zenodo.5144961>
 - Other materials, including documents for comparative evaluation, graphical models, and diagrams of model documentation: <http://doi.org/10.5281/zenodo.5184721>, <http://doi.org/10.5281/zenodo.4779123>, <http://doi.org/10.5281/zenodo.5596595>, <http://doi.org/10.5281/zenodo.5596748>
- In 2020, I carried out the research fellowship activity in the context of the development of the digital edition of the Letters of Vespasiano da Bisticci at the Digital Humanities Advanced Research Centre (DH.ARC). The results are:
 - A website dedicated to documenting the methodology and conceptual model of the edition: <https://dharc-org.github.io/vespasiano-da-bisticci-letters-de/documentation/index.html>
 - Optimization of the existing edition website: <http://projects.dharc.unibo.it/vespasiano/>
- In 2019, I carried out an internship at the Interdepartmental Research Center in History of Law, Philosophy and Sociology of Law and Legal Informatics (CIRSFID) of the University of Bologna, within the context of the IRNERIO project. The results are:
 - Publication of a scientific article regarding the development of an ontology for the semantic modeling of digitized manuscripts contained in the project catalog: <https://doi.org/10.6092/issn.2532-8816/11187>

TEACHING ACTIVITIES

- In 2023, I delivered guest lectures on Web technologies as part of the Computer Skills course within the Cultural Heritage studies program at the Ravenna campus.
- In 2021, I presented the workflow of the National Edition of the Works of Aldo Moro during the Semantic Digital Libraries course in the Digital Humanities and Digital Knowledge master's degree program.

PUBLICATIONS

- Barzaghi, S., Bordignon, A., Gualandi, B., & Peroni, S. (2024). Thinking Outside the Black Box: Insights from a Digital Exhibition in the Humanities (arXiv:2402.12000). arXiv. <https://doi.org/10.48550/arXiv.2402.12000>
- Barzaghi, S. (2024). HeRO: A Semantic Framework for Heritage Risk Assessment in the SIRIUS Project. In E. Bernasconi, A. Mannocci, A. Poggi, A. Salatino, & G. Silvello (Eds.), Proceedings of the 20th Conference on Information and Research science Connecting to Digital and Library science (Vol. 3643, pp. 189–202). CEUR. <https://ceur-ws.org/Vol-3643/#paper18>
- Balzani, R., Barzaghi, S., Bitelli, G., Bonifazi, F., Bordignon, A., Cipriani, L., Colitti, S., et al. (2023). Saving temporary exhibitions in virtual environments: the Digital Renaissance of Ulisse Aldrovandi. arXiv. <https://doi.org/10.48550/arXiv.2308.15920>.
- Barzaghi, S., Collina, F., Fabbri, F., Giacomini, F., Bordignon, A., Balzani, R., Bitelli, G., et al. (2023). Digitisation of Temporary Exhibitions: The Aldrovandi Case. <https://doi.org/10.2312/GCH.20231176>.
- Fabbri, F., Collina, F., and Barzaghi, S. (2023). AI and Chatbots as a Storytelling Tool to Personalize the Visitor Experience. The Case of National Museum of Ravenna. <https://doi.org/10.5281/zenodo.7973638>.
- Barzaghi, S. (2021). La modellazione dei dati nell'Edizione Nazionale delle Opere di Aldo Moro (2.0.1). Zenodo. <https://doi.org/10.5281/zenodo.5144961>.

- Barzaghi, S. (2021). Source code for processing the National Edition of Aldo Moro's works data (1.0.0). Zenodo. <https://doi.org/10.5281/zenodo.5592470>.
- Barzaghi, S. (2021). Competitive audit for designing and developing the National Edition of Aldo Moro's works (1.1.0). Zenodo. <https://doi.org/10.5281/zenodo.5184721>.
- Barzaghi, S. (2021). Protocol of the competitive audit for designing and developing the National Edition of Aldo Moro's works. Protocols.io. <https://dx.doi.org/10.17504/protocols.io.bxbipike>.
- Barzaghi, S. (2021). National Edition of Aldo Moro's works (RDF Dataset). Zenodo. <https://doi.org/10.5281/zenodo.5592157>.
- Tomasi, F., Daquino, M., and Barzaghi, S. (2020). Vespasiano da Bisticci, Lettere. Knowledge Base 2020. Archive. Alma Mater Studiorum - Università di Bologna. <https://doi.org/10.6092/UNIBO/AMSACTA/6852>.
- Barzaghi, S., Palmirani, M., and Peroni, S. (2020). Development of an ontology for modelling medieval manuscripts: the case of Progetto IRNERIO. Umanistica Digitale, 5(9), 117–140. <https://doi.org/10.6092/issn.2532-8816/11187>.
- Auddino, A., Barzaghi, S., Bernabè, A., Cavestri, D., Foschi, A., Franchi, C., Heibi, I., Mangialardo, F., Mariani, F., Peroni, S., and Spinaci, G. (2019). Conformità all'Open Access delle riviste pubblicate dall'Università di Bologna (1.0.1). Zenodo. <https://doi.org/10.5281/zenodo.3344898>
- Cavestri, C., Mangialardo, F., Barzaghi, S., and Peroni, S. (2019). Protocollo di Conformità di Riviste Scientifiche all'Open Access. Protocols.io. <https://dx.doi.org/10.17504/protocols.io>

LANGUAGES

English (Advanced)



Italian (Native)



INTERESTS AND SKILLS

Linked Open Data Publishing

Open Science

Data Modeling

Data Analysis

User Experience Design

Information Architecture

Web Development

Technical Writing and Documentation

Storytelling

Python

XML

HTML

CSS

Javascript

RDF

SPARQL

OWL

Git

Figma

Jira

Markdown

MS Office

Drupal

Protégé

Google Suite

Empathy

Precision

Learnability

Teamwork

Problem Solving

Critical Thinking

Adaptability

Inclusivity

In compliance with the Italian legislative Decree no. 196 dated 30/06/2003, I hereby authorize you to use and process my personal details contained in this document.