Arcangelo Massari

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https://orcid.org/0000-0002-8420-0696 | **GitHub:** https://github.com/arcangelo7

EDUCATION AND TRAINING

1 DEC 2022 – CURRENT
PHD IN CULTURAL HERITAGE IN THE DIGITAL ECOSYSTEM Alma Mater Studiorum, University of Bologna

Website https://corsi.unibo.it/2cycle/DigitalHumanitiesKnowledge

3 JUL 2022 – 9 JUL 2022
ISWS 2022 PARTICIPATION International Semantic Web Research Summer School

Website http://2022.semanticwebschool.org/

AUG 2019 – NOV 2021
MASTER DEGREE Alma Mater Studiorum, University of Bologna

Website https://corsi.unibo.it/2cycle/DigitalHumanitiesKnowledge |

Field of study Digital Humanities and Digital Knowledge | **Final grade** 110/110 with honours |

Level in EQF EQF level 7 | **Type of credits** CFU | **Number of credits** 120 |

Thesis A methodology and an implementation to perform live time-traversal queries on RDF datasets

AUG 2017 – NOV 2019
BACHELOR DEGREE Alma Mater Studiorum, University of Bologna

Field of study Humanities | **Final grade** 110/110 with honours | **Level in EQF** EQF level 6 | **Type of credits** CFU |

Number of credits 180 | **Thesis** Valorizzare il sapere digitale: un esperimento di progettazione

WORK EXPERIENCE

OCT 2022 – CURRENT Bologna, Italy
TEACHING TUTOR ALMA MATER STUDIORUM UNIVERSITY OF BOLOGNA

1. Lab sessions as part of the teaching in Computational thinking and programming of the Master's degree course in Digital humanities and digital knowledge
2. Tutoring sessions within the framework of the teaching in Data science of the Master's degree course in Digital humanities and digital knowledge

30 NOV 2021 – 31 OCT 2022 Bologna, Italy
RESEARCH FELLOW RESEARCH CENTRE FOR OPEN SCHOLARLY METADATA (UNIVERSITÀ DI BOLOGNA)

I was involved in the OpenAIRE-Nexus project, and I developed software to integrate OpenCitations into the European Open Science Cloud

LANGUAGE SKILLS

Mother tongue(s): **ITALIAN**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C1	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

DIGITAL SKILLS

Application Development MEVN stack: MongoDB, Express.js, Vue.js, Node.js │ Blazegraph │ Blender │ Flask │ Frontend: Bootstrap, D3.js, Handlebars.js, Jinja2, JQuery, Sass │ Linux: Debian, Raspbian, Ubuntu │ Python │ Semantic Web technologies │ Web technologies: HTML, CSS, Javascript │ XML technologies: XML, XSLT, XPath, XQuery, TEI │ GraphDB

ADDITIONAL INFORMATION

PUBLICATIONS

Representing provenance and track changes of cultural heritage metadata in RDF: a survey of existing approaches

– 2023
This contribution offers a systematic review of the metadata representation models for provenance in RDF. Presented at the ADHO Digital Humanities Conference 2023.

Enabling Portability and Reusability of Open Science Infrastructures – 2022

This paper presents a methodology for designing a containerized and distributed open science infrastructure to simplify its reusability, replicability, and portability in different environments.

TPDL 2022, Padua, Italy. Lecture Notes in Computer Science, vol 13541. Springer, Cham

How to structure citations data and bibliographic metadata in the OpenCitations accepted format –

2022
The OpenCitations organization is working on ingesting citation data and bibliographic metadata directly provided by the community (e.g., scholars and publishers). This paper illustrates how such data should be structured to comply with the OpenCitations accepted format.

ULITE 2022, Cologne, Germany. CEUR-WS.org

Identifying and correcting invalid citations due to DOI errors in Crossref data – 2022

This work aims to identify classes of DOI mistakes by analysing the open bibliographic metadata available in Crossref, highlighting which publishers were responsible for such mistakes and how many of these incorrect DOIs could be corrected through automatic processes.

Scientometrics 127, 3593–3612

A methodology and an implementation to perform live time-traversal queries on RDF datasets – 202

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This master's thesis introduces a methodology to perform live time-traversal queries on RDF datasets and software based on this procedure. The Python software is called time-agnostic-library, and it enables all the time-related retrieval functionalities on every dataset that records provenance according to the OpenCitations Data Model. Also, it was used to develop a web application, the time-agnostic-browser, to achieve the same results through a graphical user interface.

- ○ time-agnostic-library: 10.5281/zenodo.5579776
- ○ time-agnostic-browser: http://51.15.198.219/
- ○ Slides supporting the presentation: 10.5281/zenodo.5650936

[Valorizzare il sapere digitale: un esperimento di progettazione](#) – 2019

This bachelor's degree thesis aims to annotate some representative Italian literature texts in XML/TEI, represent them in HTML using XSLT, and offer services: a map, a timeline, and some textual analysis tools.

- Website: https://arcangelo7.github.io/collezione-digitale-poesie/
- Repository: 10.5281/zenodo.5604619

CONFERENCES AND SEMINARS

21 MAR 2023 – 23 MAR 2023 – Gothenburg, Sweden
RDA 20th Plenary Meeting - Gothenburg Participation in the RDA 20th Plenary Meeting with a contribution entitled "Adopting the Scientific Knowledge Graphs Interoperability Framework in OpenCitations"

Links https://doi.org/10.5281/zenodo.7702070 | https://www.rd-alliance.org/plenaries/rda-20th-plenary-meeting-gothenburg-hybrid

PROJECTS

MAR 2021 – JUN 2021
Cleaning different types of DOI errors found in cited references on Crossref using automated methods The purpose of this work is to find an automated process to repair invalid DOI names.

- Data Management Plan: 10.5281/zenodo.4928592
- Protocol introducing the methodology: 10.17504/protocols.io.buuknwuw
- Software developed: 10.5281/zenodo.4946380
- The data gathered while running the methodology: 10.5281/zenodo.4892551
- Article presenting the research: 10.5281/zenodo.4914003
- Slides supporting the presentation: 10.5281/zenodo.4738553

DEC 2020 – MAR 2021
Plain X: redesign of the Paneangeli mobile application Redesign of the Paneangeli mobile app to better address users from the 50-60 years segment. A feasibility study was conducted after completing an expert usability review and user testing on Paneangeli and its direct competitor, Giallo Zafferano. The application was redesigned, adopting the CAO=S model. Finally, various formative and summative inspections and tests on real users were carried out to assess the user experience of the new design.

- Report and final design: 10.5281/zenodo.5650747

DEC 2020 – FEB 2021
GenO - Gender Equality Open Data Gender equality is a broad term involving several factors: to better understand the complex situation of this basic human right, GenO collects datasets about labour force, health, gender pay gap, childcare, digital economy and education. Through a legal, ethical and technical analysis of the sources used and the creation of meshup datasets and visualizations, GenO aims to provide a heterogeneous perspective on gender equality and how it is (or is not) guaranteed in different countries.

- Website: https://gen-0.github.io/
- Repository: 10.5281/zenodo.5650764

NOV 2020 – JAN 2021
Network analysis of the characters in A Game of Thrones: seeking for a predictive model of their death In the context of quantitative literary analysis studies, this research aims to verify the existence of a predictive model of characters' death in literary works. Using George R. R. Martin's book *A Game of Thrones,* a monadic level test of logistic regression was performed between several centrality measures and the life and death condition of the characters at the end of the book.

- Working paper: 10.5281/zenodo.5650800

JUL 2020 – OCT 2020
MMMM (Metadata Model for Modern Magazines) A framework to easily publish magazine numbers according to a modern and accurate page design. Articles are written in TEI and are represented in HTML and Docbook using XSLT. Metadata are converted on the fly from/to HTML, RDFa, Microdata, and JSON/LD.

- Website: https://arcangelo7.github.io/mmmm/
- Repository: 10.5281/zenodo.5603901

MAR 2020 – JUN 2020

From noise to music This project aims to promote the fiftieth anniversary of Bruno Maderna through an animation made in Blender. It describes the relationship between music and computers in the twentieth century.

- Website: https://arcangelo7.github.io/maderna-animation/
- Repository: 10.5281/zenodo.5604459

JAN 2020 – APR 2020

Ada Lodlace Knowledge organization around Ada Lovelace, Charles Babbage, and Luigi Federico Menabrea, through the realization of a conceptual model and its representation in RDF.

- Website: https://ada-lodlace.github.io/
- Repository: 10.5281/zenodo.5604546

NOV 2019 – JAN 2020

Meta Analyser Tool Python software that accepts an input CSV file containing metadata on academic articles to perform analysis on such data.

- Repository: 10.5281/zenodo.5604571

APR 2019 – JUL 2019

Where M I – 21st Century audio tour guide A pair of apps offers an agile and free way to quickly find audio-tourist guides on the web and create new ones.

- Repository: 10.5281/zenodo.5604637

I authorise the processing of my personal data in the CV according to Art. 13 of Legislative Decree no. 196 of 30 June 2003 - "Personal Data Protection Code" and Art. 13 GDPR 679/16 - "European Personal Data Protection Regulation"

Bologna , 16 May 2023

Arcangelo Massari