

PERSONAL INFORMATION

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CURRENT POSITION

Assistant Professor

Department of Classical Philology and Italian Studies - University of Bologna

SHORT BIO

I'm an Assistant Professor at the Department of Classical Philology and Italian Studies of the University of Bologna.

I obtained my master's degree in computer engineering at Sapienza University of Rome in 2014. I developed my master thesis under the supervision of Professor Giuseppe De Giacomo, in the scope of service integration. During this experience I started my research on formal semantics and particularly on their application in the automatic integration of services whose behaviour is formally described.

Few months later, I joined the Institute of Cognitive Science and Technology of the CNR in Rome as research fellow. During this period I continued the research on formal semantics but from a different standpoint, i.e. designing ontologies in cultural heritage and agri-food domains (cf. Cultural-ON and FOOD projects) and integrating knowledge extracted from structured sources following the Linked Data paradigm (i.e. Cultural-ON and FOOD national projects and the EU project MARE).

In 2015 I obtained a doctoral scholarship at University of Bologna and I continued my research on ontologies, common sense knowledge extraction and Semantic Web applied at the social robotics domain under the supervision of Professor Paolo Ciancarini and Dr. Valentina Presutti. During my doctoral studies, I have continued the collaboration with STLab on the EU-H2020 MARIO project which provided me the opportunity of experimenting the contributions of my research work in a socially assistive robotics case study and in ontology design projects within the cultural heritage domain (i.e. ArCo, NEPTIS, Portale delle fonti per la storia della Repubblica italiana). I have successfully defended my PhD in 2019.

In 2018 I have been a visiting student at the Vrije Universiteit of Amsterdam under the supervision of Prof. Frank van Harmelen. The result of this collaboration is an article that has been presented at ISWC 2019.

I continued my research on formal and empirical semantics at Institute of Cognitive Science and Technology as post-doctoral research fellow. During the last year I took part into multiple research projects in the cultural heritage (i.e. EcoDigit, ArCo 2, Atlas of paths and IDEHA) aimed at developing ontologies and knowledge graphs to formally describe and enhance the dissemination of the Italian cultural heritage.

Since 2015 I have been serving as teaching tutor for the University of Bologna.

I have also served the scientific community by co-organizing international research events, participating to multiple conference and workshop program committees, reviewing papers for international journal, conferences and workshops. I have co-authored scientific papers for international conferences including IJCAI, AAAI, ISWC, EKAW and ER.

According to Google Scholar, my publications have received 135 citations, and my H-Index is 6. According to Scopus, my publications have received 57 citations, and my H-Index is 3.

I have collaborated to the design and development of multiple ontologies, knowledge graphs and open source software frameworks (see dedicated sections below).

Currently my research work focuses on extracting, engineering and analysing ontology-based knowledge graphs. The main application domains I am investigating are cultural heritage, social robotics and common sense knowledge.

Research Interests Knowledge Graphs, Linked (Open) Data, Knowledge Extraction, Ontology Engineering, Knowledge Representation, Knowledge Integration, Natural Language Understanding, Common Sense Knowledge, Empirical Semantics, Social Robotics.

PROFESSIONAL CAREER

- Jul 2020 – Jul 2023** **Assistant Professor**
Department of Classical Philology and Italian Studies - University of Bologna (Bologna, Italy)
- Mar 2020 – Jul 2020** **Postdoctoral researcher**
Semantic Technology Laboratory STLab (Institute of Cognitive Sciences and Technologies ISTC - National Research Council CNR), Rome (Italy)
Ref. ISTC-AdR-268-2020-RM del 17/01/2020
- Nov 2018 – Feb 2020** **Junior research fellow**
Semantic Technology Laboratory STLab (Institute of Cognitive Sciences and Technologies ISTC - National Research Council CNR), Rome (Italy)
Ref. ISTC-AdR-245-2018-RM del 02/10/2018
Ref. ISTC-AdR-254-2019-RM del 14/02/2019
- Dec 2015 – Oct 2018** **Research assistant**
Semantic Technology Laboratory STLab (Institute of Cognitive Sciences and Technologies ISTC - National Research Council CNR), Rome (Italy)
Ref. Avviso N. 11/ISTC/2015
- Jan 2015 – Oct 2015** **Junior research fellow**
Semantic Technology Laboratory STLab (Institute of Cognitive Sciences and Technologies ISTC - National Research Council CNR), Rome (Italy)
Ref. ISTC-AdR-216-2014-RM del 25/11/2014

EDUCATION

- Nov 2015 – Apr 2019** **Phd Programme in Computer Science and Engineering**
Alma mater studiorum - Università di Bologna, Bologna (Italy)
Thesis title: Engineering Background Knowledge for Social Robots
Supervisors: prof. Paolo Ciancarini and Dr. Valentina Presutti
Defended on 3 April 2019
- Jul 2018 - Sep 2018** **Visiting Student**
Vrije Universiteit, Amsterdam (Netherlands)
Visiting student at the Knowledge Representation and Reasoning research group lead by Frank Van Harmelen.
Topic: Analysis of the empirical semantics of ontology entities in large collaborative knowledge graphs.

Responsible: prof. Frank Van Harmelen

6-11 March 2016 **Bertinoro International Spring School 2016 (BISS 2016)**

Bertinoro (FC) Italy

5-11 July 2015 **11th Summer School on Ontology Engineering and the Semantic Web (SSSW15)**

Bertinoro (FC) Italy

Sep 2011 - Oct 2014 **Master Degree in Computer Engineering**

Sapienza - University of Rome, Rome (Italy)

Main subjects: Artificial Intelligence, Software Engineering, Distributed Systems, Service Composition, Information Integration, Information Retrieval and Data Mining, Human-Computer Interaction, Cryptography, Business Process Management

Master thesis title: Data-Aware Service Composition

The aim of the thesis was to define a formal framework for the characterization and theoretical investigation of the problem of data-aware service composition. **Related research areas:** Automated Service Composition, Data-Aware Business Processes, Reasoning about actions

Advisor: Prof. Giuseppe De Giacomo

Final Mark: 110/110

Certification number: 1485610 **Issue Date:** 02/12/2014

Sep 2007 – Jul 2011 **Bachelor Degree in Computer Engineering**

Sapienza - University of Rome, Rome (Italy)

Main subjects: Numerical Analysis, Physics, Object-oriented software design, Operating systems, Relational Database Design, Theoretical Computer Science, Electronics, Operative Research, Probability Theory, Control Theory

Thesis title: Shoulders - Sistema per il controllo dei parametri vitali di pazienti la cui respirazione è assistita da un ventilatore

Design and development of a system for monitoring patients with respiratory failures. Main technologies used: Java and Mysql.

Final Mark: 104/110

Certification number: 1485609 **Issue Date:** 02/12/2014

TEACHING

Dec 2015 – Jul 2020 **Teaching assistant (Tutor)**

University of Bologna, Bologna (Italy)

Tutor of the course of Software Engineering (prof. Davide Rossi)

First cycle degree programme (L) in Information Science for Management

Duration: 32 hours per academic year.

A.Y. 2015/2016, 2016/2017, 2017/2018, 2018/2019, 2019/2020

Ref. contact prof. Davide Rossi or Dr. Luisa Lanzarini

Feb 2020 – Jul 2020 **Teaching assistant (Tutor)**

University of Bologna, Bologna (Italy)

Tutor of the course of Network Security (prof. Ozalp Baboglu)

First cycle degree programme (L) in Computer Science

Duration: 32 hours per academic year.

A.Y. 2019/2020

Ref. contact prof. Ozalp Babaoglu or Dr. Luisa Lanzarini

30 June 2019 - 6 July 2019 **Assistant Tutor**

International Semantic Web School (ISWS), Bertinoro, FC (Italy)

Ref. contact Dr. Valentina Presutti or Prof. Harald Sack

Thesis (co)advising A list of thesis that I have co-advised so far as external supervisor. All theses have been developed and successfully defended at the University of Bologna.

- *Costruzione di una base di conoscenza lessicale basata su FrameNet*. Stefania Lusardi. Corso di Studio in Informatica per il management (2018).
- *Sviluppo di un sistema di crowdsourcing per la validazione e l'arricchimento di dataset*. Hamza Elatfi. Corso di Studio in Informatica per il management (2019).
- *Conoscenze di Senso Comune: Una Panoramica sui Dataset*. Noemi Trivisonno. Corso di Studio in Informatica per il management (2019).
- *Analisi Empirica delle Distinzioni Fondazionali in Linked Open Data*. Serena Passerini. Corso di Studio in Informatica per il management (2019).

Invited Talks and Seminars

- **Tandem seminar @ Wimmics (INRIA): Addressing Knowledge integration with a frame-driven approach** (*Sophia Antipolis, France, Feb 9, 2017*)
- **Seminar @ Course “Social Robots”, Master in Computer Science. University of Bologna: An Introduction to ROS.** *Apr, 29, 2020*

SCIENTIFIC PUBLICATIONS

	Google Scholar	Scopus
Bibliometric Record		
Number of publications	20	15
Number of citations	135	57
H-Index	6	3

Conference Papers Conference rating has been obtained from the GGS Conference Rating 2018 last updated: May, 30th 2018 (<http://valutazione.unibas.it/gii-grin-scie-rating/ratingSearch.jsf>)

1. L. Asprino, V. Presutti, and A. Gangemi. “Matching Ontologies Using a Frame-Driven Approach”. In: *Proceedings of the 20th International Conference on Knowledge Engineering and Knowledge Management and Satellite Events, EKM and Drift-a-LOD (EKAW 2016)* (Bologna, Italy). Edited by P. Ciancarini, F. Poggi, M. Horridge, J. Zhao, T. Groza, M. C. Suarez-Figueroa, M. d’Aquin, and V. Presutti. Springer International Publishing, 2016, pages 101–104. DOI: 10.1007/978-3-319-58694-6_9 Conference Ranking: GGS Class: 3, CORE: B
2. L. Asprino. “Addressing Knowledge Integration with a Frame-Driven Approach”. In: *Proceedings of the 20th International Conference on Knowledge Engineering and Knowledge Management and Satellite Events, EKM and Drift-a-LOD (EKAW 2016)* (Bologna, Italy). Edited by P. Ciancarini, F. Poggi, M. Horridge, J. Zhao, T. Groza, M. C. Suarez-Figueroa, M. d’Aquin, and V. Presutti. Springer International Publishing, 2016, pages 205–210. DOI: 10.1007/978-3-319-58694-6_32 Conference Ranking: GGS Class: 3, CORE: B
3. A. Gangemi, M. Alam, L. Asprino, V. Presutti, and D. Reforgiato Recupero. “Framester: A Wide Coverage Linguistic Linked Data Hub”. In: *Proceedings of the 20th International Conference on Knowledge Engineering and Knowledge Management (EKAW 2016)* (Bologna, Italy). Edited by E. Blomqvist, P. Ciancarini, F. Poggi, and F. Vitali. Springer International Publishing, 2016, pages 239–254. DOI: 10.1007/978-3-319-49004-5_16 Conference Ranking: GGS Class: 3, CORE: B
4. V. Presutti, G. Lodi, A. Nuzzolese, A. Gangemi, S. Peroni, and L. Asprino. “The Role of Ontology Design Patterns in Linked Data Projects”. In: *Proceedings of the 35th International Conference on Conceptual Modeling (ER 2016)* (Gifu, Japan). Edited by I. Comyn-Wattiau, K. Tanaka, I.-Y. Song, S. Yamamoto, and M. Saeki. Springer International Publishing, 2016, pages 113–121. DOI: 10.1007/978-3-319-46397-1_9 Conference Ranking: GGS Class: 3, CORE: A

5. S. Peroni, G. Lodi, L. Asprino, A. Gangemi, and V. Presutti. "FOOD: FOod in Open Data". In: *Proceedings of the 15th International Semantic Web Conference (ISWC 2016), Part II* (Kobe, Japan). Edited by P. Groth, E. Simperl, A. Gray, M. Sabou, M. Krötzsch, F. Lecue, F. Flöck, and Y. Gil. Springer International Publishing, 2016, pages 168–176. DOI: 10.1007/978-3-319-46547-0_18 Conference Ranking: GGS Class: 1, CORE: A
6. L. Asprino, V. Presutti, A. Gangemi, and P. Ciancarini. "Frame-Based Ontology Alignment". In: *Proceedings of the 31st AAAI Conference on Artificial Intelligence and the Twenty-Ninth Innovative Applications of Artificial Intelligence Conference (AAAI 2017)* (San Francisco, California USA). Edited by S. P. Singh and S. Markovitch. AAAI Press, Palo Alto, California, 2017, pages 4095–4096 Conference Ranking: GGS Class: 1, CORE: A++
7. L. Asprino, V. Basile, P. Ciancarini, and V. Presutti. "Empirical Analysis of Foundational Distinctions in Linked Open Data". In: *Proceedings of the 27th International Joint Conference on Artificial Intelligence and the 23rd European Conference on Artificial Intelligence (IJCAI-ECAI 18)*. Edited by J. Lang. 2018, pages 3962–3969. ISBN: 978-0-9992411-2-7. DOI: 10.24963/ijcai.2018/551 Conference Ranking: GGS Class: 1, CORE: A++
8. L. Asprino, W. Beek, P. Ciancarini, F. van Harmelen, and V. Presutti. "Observing LOD Using Equivalent Set Graphs: It Is Mostly Flat and Sparsely Linked". In: *The Semantic Web - ISWC 2019 - 18th International Semantic Web Conference, Auckland, New Zealand, October 26-30, 2019, Proceedings, Part I*. edited by C. Ghidini, O. Hartig, M. Maleshkova, V. Svátek, I. F. Cruz, A. Hogan, J. Song, M. Lefrançois, and F. Gandon. Volume 11778. Lecture Notes in Computer Science. Springer, 2019, pages 57–74. ISBN: 978-3-030-30792-9. DOI: 10.1007/978-3-030-30793-6_4. URL: https://doi.org/10.1007/978-3-030-30793-6_4 Conference Ranking: GGS Class: 1, CORE: A
9. L. Asprino, W. Beek, P. Ciancarini, F. van Harmelen, and V. Presutti. "Triplifying Equivalence Set Graphs". In: *Proceedings of the ISWC 2019 Satellite Tracks (Posters & Demonstrations, Industry, and Outrageous Ideas) co-located with 18th International Semantic Web Conference (ISWC 2019), Auckland, New Zealand, October 26-30, 2019*. Edited by M. C. Suárez-Figueroa, G. Cheng, A. L. Gentile, C. Guéret, C. M. Keet, and A. Bernstein. Volume 2456. CEUR Workshop Proceedings. CEUR-WS.org, 2019, pages 253–256. URL: <http://ceur-ws.org/Vol-2456/paper66.pdf> Conference Ranking: GGS Class: 1, CORE: A
10. L. Asprino, V. A. Carriero, A. Gangemi, L. Marinucci, A. G. Nuzzolese, and V. Presutti. "Atlas of Paths: a Formal Ontology of Historical Pathways in Italy". In: *Proceedings of the ISWC 2019 Satellite Tracks (Posters & Demonstrations, Industry, and Outrageous Ideas) co-located with 18th International Semantic Web Conference (ISWC 2019), Auckland, New Zealand, October 26-30, 2019*. Edited by M. C. Suárez-Figueroa, G. Cheng, A. L. Gentile, C. Guéret, C. M. Keet, and A. Bernstein. Volume 2456. CEUR Workshop Proceedings. CEUR-WS.org, 2019, pages 149–152. URL: <http://ceur-ws.org/Vol-2456/paper39.pdf> Conference Ranking: GGS Class: 1, CORE: A
11. L. Asprino, A. Gangemi, A. G. Nuzzolese, V. Presutti, and D. Reforgiato Recupero. "Robotica Sociale e Tecnologie Semantiche per l'Invecchiamento Attivo". In: *Ital-IA Convegno Nazionale CINI sull'Intelligenza Artificiale*. 2019 Conference Ranking: Not available
12. L. Asprino, P. Ciancarini, and V. Presutti. "Analysing Knowledge Domains that Emerge from Linked Open Data". In: *Atti della Conferenza GARR 2019 - Selected Papers*. 2019 Conference Ranking: Not available
13. L. Asprino, A. Budano, M. Canciani, L. Carbone, M. Ceriani, L. Marinucci, F. Meschini, M. L. Mongelli, A. G. Nuzzolese, V. Presutti, M. Puccini, and M. Saccone. "EcoDigit Ecosistema Digitale per la fruizione e la valorizzazione dei beni e delle attività culturali del Lazio". In: *Proceedings of the IX Convegno Annuale AIUCD (Poster)*. 2020 Conference Ranking: Not available

Book Chapters

1. G. Lodi, L. Asprino, A. G. Nuzzolese, V. Presutti, A. Gangemi, D. R. Recupero, C. Veninata, and A. Orsini. "Semantic Web for Cultural Heritage Valorisation". In: *Data Analytics in Digital Humanities*. Edited by S. Hai-Jew. Springer International Publishing, 2017, pages 3–37. DOI: 10.1007/978-3-319-54499-1_1

2. L. Asprino, A. G. Nuzzolese, A. Russo, A. Gangemi, V. Presutti, and S. Nolfi. "An Ontology Design Pattern for supporting behaviour arbitration in cognitive agents". In: *Advances in Ontology Design and Patterns*. Edited by K. Hammar, P. Hitzler, A. Krisnadhi, A. Ławrynowicz, A. G. Nuzzolese, and M. Solanki. IOS Press, 2017, pages 85–95
3. L. Asprino, A. Gangemi, A. G. Nuzzolese, V. Presutti, D. R. Recupero, and A. Russo. "Ontology-Based Knowledge Management for Comprehensive Geriatric Assessment and Reminiscence Therapy on Social Robots". In: *Data Science for Healthcare - Methodologies and Applications*. Edited by S. Consoli, D. R. Recupero, and M. Petkovic. Springer, 2019, pages 173–193. ISBN: 978-3-030-05248-5. DOI: 10.1007/978-3-030-05249-2_6. URL: https://doi.org/10.1007/978-3-030-05249-2_6

Workshop Papers

1. L. Asprino, A. Gangemi, A. G. Nuzzolese, V. Presutti, D. Reforgiato Recupero, and A. Russo. "Autonomous Comprehensive Geriatric Assessment". In: *Proceedings of the 1st International Workshop on Application of Semantic Web technologies in Robotics co-located with 14th ESWC (ANSWER 2017)* (Portoroz, Slovenia). Edited by E. Bastianelli, M. d'Aquin, and D. Nardi. 2017, pages 41–45
2. L. Asprino, A. Gangemi, A. G. Nuzzolese, V. Presutti, and A. Russo. "A Knowledge Management System for Assistive Robotics". In: *Proceedings of the 1st International Workshop on Application of Semantic Web technologies in Robotics co-located with 14th ESWC (ANSWER 2017)* (Portoroz, Slovenia). Edited by E. Bastianelli, M. d'Aquin, and D. Nardi. 2017, pages 46–50
3. L. Asprino, A. Gangemi, A. G. Nuzzolese, V. Presutti, and A. Russo. "Knowledge-driven Support for Reminiscence on Companion Robots". In: *Proceedings of the 1st International Workshop on Application of Semantic Web technologies in Robotics co-located with 14th ESWC (ANSWER 2017)* (Portoroz, Slovenia). Edited by E. Bastianelli, M. d'Aquin, and D. Nardi. 2017, pages 51–55

RESEARCH PRODUCTS

Ontologies

A list of ontologies I have contributed to with indication of the targeted domain:

FOOD Ontology Network <https://w3id.org/food> (Agri-food domain), an ontology network on quality schemes for agriculture and food products (cf. ISWC 2016 paper).

Cultural-ON <http://dati.beniculturali.it/> (Cultural heritage domain) An ontology on cultural sites and events (cf. Data Analytics in Digital Humanities book chapter).

PPDB ontology <http://w3id.org/ppdb/ontology/> (Linguistic domain) An ontology describing semantics of data in PPDB (developed in the context of Framester project)

EcoDigit Ontologies <https://github.com/ecodigit/workspace> (Cultural heritage domain), a set of ontologies describing people and organizations in cultural domain.

ArCo Ontology Network <https://w3id.org/arco> (Cultural heritage domain) a set of ontologies describing the cultural heritage domain (cf. ArCo project).

FOX Metamodel <https://w3id.org/fox> (Common sense domain) A metamodel for describing foundational distinctions based on common sense (cf. IJCAI 2018 paper)

NEPTIS Ontology <http://w3id.org/neptis/ontology> (Cultural heritage domain) an ontology automatically extracted from data Sicilian cultural immaterial heritage (cf. NEPTIS project)

Affordance Ontology Design Pattern Available on ODP Portal (Robotics domain) an ontology design pattern describing the affordance relation (cf. book chapter in *Advances in Ontology Design and Patterns*)

MARIO Ontology Network <http://etna.istc.cnr.it/mario/mon/index.html> (Social Robotics domain) An ontology network describing the socially assistive robotics domain (cf. PhD Thesis)

Software

A list of the open source software frameworks I have developed:

FOX (<https://github.com/luigi-asprino/fox>) A software framework for assessing foundation distinction over linked data entities (developed in the context of the work described in the IJCAI 2019 paper)

Edwin (<https://github.com/luigi-asprino/edwin>) A software framework for building and analysing Equivalence Set Graphs (developed in the context of the work described in the ISWC 2019 paper)

LOD resource harvester (<https://github.com/luigi-asprino/lod-resource-harvester>) A simple tool for harvesting LOD resources (developed in the context of the ECODIGIT project).

rocksmmap (<https://github.com/luigi-asprino/rocks-map>) A library for accessing RocksDB instances as Java Maps (developed in the context of the work described in the ISWC 2019 paper)

framester-conceptnet (<https://github.com/luigi-asprino/framester-conceptnet>) A software tool for serializing ConceptNet in RDF (developed in the context of Framester project, cf. EKAW 2016 paper)

refact (<https://github.com/luigi-asprino/refact>) A simple tool for refactoring RDF graphs by using SPARQL construct queries (developed in the context of Framester project, cf. EKAW 2016 paper)

PPDB2RDF (<https://github.com/luigi-asprino/ppdb2rdf>) A tool for serialising Paraphrase Database (PPDB) in RDF format (developed in the context of Framester project, cf. EKAW 2016 paper)

Lizard (<https://github.com/luigi-asprino/lizard>) A tool for dynamically generating software object-oriented APIs for accessing knowledge graphs (cf. PhD thesis).

Knowledge Graphs A list of openly available Knowledge Graphs I have co-developed with indication of the targeted domain:

FOOD <https://w3id.org/food> (Agri-food domain) a knowledge graph on quality schemes for agriculture and food products extracted from policy documents (cf. ISWC 2016 paper and FOOD project).

Luoghi e eventi della Cultura <http://dati.beniculturali.it/> (Cultural heritage domain) a knowledge graph about the Italian cultural sites (cf. Data Analytics in Digital Humanities book chapter)

Framester <https://w3id.org/framester> (Linguistic domain) A linked data hub integrating several linguistic and ontological resources such as WordNet, FrameNet etc. (cf. EKAW 2016 paper)

EcoDigit Knowledge Graph <http://ecodigit.dtclazio.it> (Cultural heritage domain) a knowledge graph about people and organizations working in the cultural heritage domain and cultural properties located in the Lazio region (developed in the context of ECODIGIT project).

ArCo Knowledge Graph <https://w3id.org/arco> (Cultural heritage domain) the knowledge graph of the Italian cultural heritage collecting data extracted from the General Catalogue of the Italian Ministry of Cultural Heritage and Activities (MiBAC) (cf. ArCo project).

FOX <https://w3id.org/fox> (Common sense domain) a empirical foundational ontology of common sense extracted from data (cf. IJCAI 2018 paper).

NEPTIS <http://w3id.org/neptis/resource/> (Cultural heritage domain) a knowledge graph of the Sicilian immaterial Cultural Heritage (cf. NEPTIS project)

The Knowledge graph feeding the “Portale delle fonti per la storia della Repubblica italiana” (Cultural heritage domain) A knowledge graph collecting metadata of historical documents about the Italian republic (cf. related project).

ACTIVITIES IN RESEARCH PROJECTS

Research Projects A list of research projects I have participated to:

FOOD *FOOD (FOod in Open Data)*
Type: Technology transfer, knowledge extraction, open data, linked data, ontology design
Funded by: AgiD (Agenzia per l'Italia Digitale)
Description: Linked data extraction starting from regulatory documents on DOP (Denomination Origin Protected) food and wine products, issued by the Ministry of Agriculture.
Role within the project: Ontology designer
Website: <https://w3id.org/food/>

Cultural-ON	<p><i>CulturalION - Luoghi della Cultura</i> Type: Technology transfer, open data, linked data, ontology design Funded by: MIBACT (Ministero dei Beni e Attività Culturali e del Turismo) Description: Guidelines for integrating, modeling, managing, and publishing Linked (Open) Data starting from cultural heritage and tourism databases, held by MIBACT. Role within the project: Ontology designer, Knowledge Graph Developer Website: http://dati.beniculturali.it/cultural_on/</p>
MARE	<p><i>MARE</i> Type: Technology transfer, software prototyping Funded by: Maritime Affairs Agency of the EU Commission Description: An integrated software system for multilingual management of fishery products. Role within the project: Main developer of the data integration solution Website: https://w3id.org/mare</p>
MARIO	<p><i>MARIO</i> Type: Research project Funded by: European Union's Horizon 2020 research and innovation programme Description: The MARIO project aims to manage active and healthy ageing through the use of caring service robots, to address and make progress on the challenging problems of loneliness, isolation and dementia in older persons through multi-faceted interventions delivered by service robots. Role within the project: Task leader (Task T5.1), Main Developer of the MARIO Ontology Network, Main Developer of the Comprehensive Geriatric Assessment App, Main Developer of the knowledge management system. Website: http://www.mario-project.eu</p>
NEPTIS	<p><i>NEPTIS</i> Type: Technology transfer, ontology engineering, linked open data, ontology design, ontology design patterns Funded by: PONREC Role within the project: Knowledge graph developer Description: NEPTIS focuses on cultural experience and cultural heritage exploitation defining and realizing CONCEPTOURING (from concept to cultural experience-oriented tour engineering), an integrated system prototype to create services and applications supporting itineraries and cultural heritage exploitation.</p>
ArCo	<p><i>ArCo (Architettura della Conoscenza)</i> Type: Technology transfer, ontology engineering, linked open data, ontology design, ontology design patterns Funded by: MIBACT (Ministero dei Beni e Attività Culturali e del Turismo) Description: ArCo aims at making available data from the Catalogo generale dei beni culturali following the paradigm of the Linked Data initiative, in an open format, in order to ensure accessibility to users and interoperability among data in cultural heritage domain. Role within the project: knowledge graph developer, scrum-master, ontology designer Website: https://w3id.org/arco</p>
Atlas of Paths	<p><i>Atlas of Paths</i> Type: Technology transfer, ontology design Funded by: MIBACT (Ministero dei Beni e Attività Culturali e del Turismo) Description: The project aims at the creation and implementation of a network of ontologies representing the information contained in the MIBACT Atlante dei Cammini d'Italia. This initiative aims to enhance the rich heritage of Italian paths – historical, naturalistic, cultural and religious – that, from north to south, cross the country promoting a new tourism dimension. Role within the project: Ontology designer</p>
Portale delle fonti per la storia della Repubblica italiana	<p><i>Portale delle fonti per la storia della Repubblica italiana</i> Type: Technology transfer, ontology engineering, linked open data, ontology design, ontology design patterns Funded by: PON Governance e Capacità Istituzionale 2014-2020 Description: "Portale delle fonti per la storia della Repubblica italiana" is one of the case studies of the project "Beni e Patrimonio Culturale: Governare La Progettazione" funded by the "PON Governance e Capacità Istituzionale 2014-2020" framework. The Portale aims at promoting the history of the Italian Republic by integrating and made available the archival heritage of several Italian institutions. Role within the project: Ontology Designer, Knowledge graph Developer, Main Developer of the Data Integration System, Main Developer of the Graph Analyser System</p>

- ECODIGIT *EcoDigit - Ecosistema Digitale per la fruizione e la valorizzazione dei beni e delle attività culturali del Lazio*
Type: Technology transfer, ontology engineering, linked open data, ontology design, ontology design patterns, knowledge extraction
Funded by: Lazio Innova
Description: EcoDigit is one of the projects of the “Centro di Eccellenza DTC Lazio”, which intends to aggregate and integrate expertises in the field of technologies applied to cultural heritage. EcoDigit aims at enriching the Anagrafe delle Competenze, another project of the DTC Lazio, with a middleware platform that is able to facilitate the integration of new data sources and to allow the publication and reuse of services for the enhancement and fruition of the cultural heritage in the Lazio region. The project is designed to integrate the collected data through open formats and semantic technologies based on Linked Data model.
Role within the project: Coordinator assistant, Ontology Designer, Knowledge graph Developer, Task Leader for the tasks T1.1, T1.2, T1.3, T1.4, T2.1, T3.2, T4.2
Website ecodigit.dtclazio.it
- SI-Robotics *SI Robotics*
Type: Research project
Funded by: PON
Description: The SI-ROBOTICS (SIR) project aims to design and develop novel solutions of collaborative assistive ICT robotics with advanced abilities to support humans in healthcare services and, at the same time, acting with a socially acceptable behavior.
Role within the project: Ontology designer
- IDEHA *IDEHA*
Type: Research project
Funded by: PON
Description: IDEHA will create an open IT platform for Cultural Heritage, combining both digital content from traditional repositories and information generated in real time by users or environmental sensors; aggregating, processing and understanding the data by utilizing new learning technologies to build services that can be used by different users (technician, researcher, tourist, etc.) profiled through specific multimodal applications (eg. mobile apps) and usable in wide scale on different cultural sites, large or small, distributed across the territory.
Role within the project: Ontology designer, Knowledge graph Developer

- Project Deliverables**
1. L. Asprino, A. Gangemi, S. Nolfi, A. Nuzzolese, N. Pisanelli, V. Presutti, and A. Russo. *D5.1 MARIO Ontology Network*. EU Project Deliverable. 2015
 2. V. Presutti, L. Asprino, A. Nuzzolese, A. Gangemi, D. Pisanelli, A. Russo, M. Raciti, A. Freitas, L. Penteridis, and A. Gkiokas. *D5.6 MARIO Reading and Listening Component*. EU Project Deliverable. 2015
 3. M. Alam, L. Asprino, L. Marinucci, A. G. Nuzzolese, V. Presutti, and A. Russo. *D1.1 Gestione del Progetto e Monitoraggio degli Obiettivi e della Qualità*. Deliverable Progetto EcoDigit. 2019
 4. M. Alam, L. Asprino, V. Carriero, L. Marinucci, A. G. Nuzzolese, V. Presutti, and A. Russo. *D1.2 Strumenti di Comunicazione e Divulgazione*. Deliverable Progetto EcoDigit. 2019
 5. M. Alam, L. Asprino, V. A. Carriero, L. Marinucci, A. G. Nuzzolese, V. Presutti, and A. Russo. *D1.3 Analisi, Monitoraggio e Azioni di Mitigazione dei Rischi*. Deliverable Progetto EcoDigit. 2019
 6. L. Asprino, L. Marinucci, V. Presutti, A. Russo, M. Ceriani, and M. Mecella. *D1.4 Piano di Sostenibilità del Middleware*. Deliverable Progetto EcoDigit. 2020
 7. L. Asprino, V. A. Carriero, L. Marinucci, A. G. Nuzzolese, M. Mecella, V. Presutti, and M. Ceriani. *D2.1 Documento di analisi dei requisiti e Survey delle tecnologie*. Deliverable Progetto EcoDigit. 2019
 8. M. Ceriani, M. Mecella, M. Saccone, M. Puccini, L. Asprino, and C. Chiarelli. *D2.2 Descrizione del Middleware (documento architetturale)*. Deliverable Progetto EcoDigit. 2019
 9. L. Asprino, L. Marinucci, A. G. Nuzzolese, and V. Presutti. *D3.2 Modello di ingresso*. Deliverable Progetto EcoDigit. 2019
 10. L. Asprino, L. Marinucci, A. G. Nuzzolese, and V. Presutti. *D3.2 Modello di ingresso (v.2)*. Deliverable Progetto EcoDigit. 2019
 11. L. Asprino, L. Marinucci, A. G. Nuzzolese, and V. Presutti. *D3.3 Studio sugli strumenti di supporto*. Deliverable Progetto EcoDigit. 2019
 12. L. Asprino, L. Marinucci, A. G. Nuzzolese, V. Presutti, M. Mecella, and M. Ceriani. *D3.4 Proof-of-Concept*. Deliverable Progetto EcoDigit. 2019
 13. A. Budano, L. Asprino, and M. Saccone. *D4.1 Censimento dei tool esistenti*. Deliverable Progetto EcoDigit. 2019
 14. L. Asprino, L. Marinucci, A. G. Nuzzolese, V. Presutti, and A. Russo. *D4.2 Strumenti per l'elaborazione semantica dei contenuti*. Deliverable Progetto EcoDigit. 2019
 15. *D4.1 - Descrizione Architetturale*. SI Robotics - Project Deliverable. 2020

ROLES IN SCIENTIFIC EVENTS

- Organising Committee Membership**
- 2nd International Semantic Web School, 30 June - 6 July 2019, Bertinoro (FC), Italy (role: Tutor Assistant).
 - The 14th Extended Semantic Web Conference. May 28th 2017 - June 1st 2017. Portoroz, Slovenia (role: Semantic Technologies Coordinator).
- Program Committee Membership**
- International Semantic Web Conference 2020 (ISWC 2020), 2-6 Nov. 2020, Athens, Greece.
 - ESWC 2020 - Poster and Demo Track, 2-4 June. 2020.
 - The 29TH ACM International Conference on information and knowledge management (CIKM 2020), 19-23 Oct. 2020.
 - Semantics EU 2020, 7-10 Sept. 2020, Amsterdam, NL.
 - The Web Conference 2020 (Semantics and Knowledge track). 20-24 April 2020. Taipei
 - The 15th International Conference, SEMANTiCS 2019, Karlsruhe, Germany, September 9–12, 2019.
 - WOP 2019. The 10th Workshop on Ontology and Semantic Web Pattern @ ISWC 2019. October 2019. Auckland, New Zealand.
 - The Sixth Italian Conference on Computational Linguistics (CLIC-it). 13-15 Nov. 2019. Bari, Italy.
 - The 15th Extended Semantic Web Conference. Poster and Demo Track. ESWC 2018. June 3rd 2018 - June 7th 2018. Heraklion, Crete, Greece.
 - WOP 2018. The 9th Workshop on Ontology and Semantic Web Pattern @ ISWC 2018. October 2018. Monterey, California, USA.
 - The 16th International Semantic Web Conference. Poster and Demo Track. ISWC 2017. 21-25 October 2017. Vienna, Austria.

WOP 2017. The 8th Workshop on Ontology and Semantic Web Pattern @ ISWC 2017. October 2017. Vienna, Austria.

Program committee member - Poster and Demo Track. ESWC 2017. The 14th Extended Semantic Web Conference. May 28th 2017 - June 1st 2017. Portoroz, Slovenia.

Program committee member. EKAW 2016. The 20th International Conference on Knowledge Engineering and Knowledge Management. 19-23 November 2016. Bologna, Italy.

Program committee member - Pattern Track. WOP 2016. The 7th Workshop on Ontology and Semantic Web Pattern @ ISWC 2016. 18th October 2016. Kobe, Japan.

Program committee member - Poster and Demo Track. ISWC 2016. The 15th International Semantic Web Conference. 17-21 October 2016. Kobe, Japan.

Reviewer WebSci 2016, ESWC 2016 Posters and Demos, IJCAI 2017, KSEM 2017, ER 2017, Journal of Web Semantics, IJCAI 2018, IEEE Big Data Congress 2018, AAAI 2019, Journal of Applied Ontologies, Journal of Data Semantics.

PERSONAL SKILLS ■

Mother tongue Italian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	C1	C1	C1

Preliminary English Test (PET) - University of Cambridge ESOL Examination

Date of Examination: June (B) 2006. Place of Entry: Castrovillari (CS)

Reference Number: 066IT0805028. Accreditation Number: 100/2031/7

Date of Issue 17/07/06 Certificate Number 0015892122

Levels: [A1 and A2: Basic user](#) – [B1 and B2: Independent user](#) – [C1 and C2: Proficient user](#)
[Common European Framework of Reference for Languages](#)

Driving licence B

European Computer Driving License (ECDL) ECDL Test Passed on 30/05/2006 (Ref. IT1129942)

ADDITIONAL INFORMATION ■

Technical Skills Skills are self-assessed by using the following rating scale: 5-Expert, 4-Professional, 3-User, 2-Learner, 1-Newbie.

- **Programming Languages:** Java (Expert), Python (User), C++ (Newbie), C (Learner)
- **Web Languages:** HTML (Expert), XML (Expert), Javascript (Expert), PHP (Newbie), XSL (Professional), JSON (Expert)
- **Semantic Web Languages:** RDF (Expert), OWL (Expert), SPARQL(Expert), RDF-HDT (User)
- **Databases:** MySQL (User), RocksDB (User), PostgreSQL (User)
- **Machine Learning Technologies:** WEKA (User), TensorFlow (Newbie), gensim (User)
- **Semantic Web Technologies:** Apache Jena (User), Fuseki (User), Virtuoso (User), LOD-View (User), D2RQ (User), LOD-View (User), Protege (User)
- **Business Process Modelling Languages:** BPMN (User), PROForma (Learner)
- **Modelling Graphical Languages:** ER (User), UML (User), ODM (User), Graffoo (User)
- **IDE:** Eclipse (User), Netbeans (User), IntelliJIDEA (User)
- **Diagrams editors:** Yed (User), Microsoft Visio (User), Bizagi (User)
- **Versioning:** Git (User), SVN (User)
- **Logic programming:** Prolog (Newbie)
- **Other Frameworks I have been using (as “User”):** Apache Web Server, Docker, Apache Manifold, Apache ActiveMQ, WSO API Manager, Bootstrap, D3Js, eXistDB, JCode-Model, Jersey, Jetty Server, Swagger, CrowdFlower (FigureEight), Stanford CoreNLP, NLTK, ApacheMaven, Latex