

# Curriculum Vitae of Luca Biccheri

## Personal Data

*Name and Surname:* Luca Biccheri

*Birth Date:* February 24, 1990

*Birth Place:* Chiaravalle (AN) - Italy

*Address:* via S. Bernardino 9/A, 60041 Sassoferrato (AN)

*E-mail:* biccheriluca@gmail.com

## Short Bio

Luca Biccheri is a postdoc at the Laboratory for Applied Ontology ISTC-CNR based in Trento. He obtained his PhD in Human Sciences in 2021, under the scope of the Eureka project promoted by Regione Marche. The project involved the partnership between the University of Urbino Carlo Bo and Halley Informatica Company (MC), with the aim of developing an ontology for public services focused on the theory of human needs. Currently, he is involved in the SMARTTEST project, which focuses on the philosophical and algorithmic analysis that guarantees the reliable transfer between a digital twin and its physical counterpart. More specifically, his work addresses the issues raised by the notion of trust applied to socio-technical systems, where various agents and numerous kinds of artefacts must interact to provide dependable services. He holds a Master's Degree in Philosophy of Science and a Bachelor's Degree in Human Sciences. His research interests include philosophical and computational ontologies, cognitive sciences and machine learning, philosophy of mind, philosophy of action, and technology.

## Education

29/06/2021

PhD

Human Sciences (Philosophy curriculum)

University of Urbino Carlo Bo

Title of the thesis: *Needs as Mental Attitudes.  
An Ontological Study for PA'S Service Design*

Mark: Excellent

18/10/2017 Master's Degree

Philosophy of Science

University of Urbino Carlo Bo

Title of the thesis: *La teoria del Sé come paradigma della cognizione embodied* (The Self Theory as a paradigm of embodied cognition)

Mark: 110/110 magna cum laude

24/11/2015 Bachelor's Degree

Human Sciences (Philosophy curriculum)

University of Urbino Carlo Bo

Title of the thesis: *L'essenza ribelle del desiderio. Note sull'Anti-Edipo di Gilles Deleuze* (The rebellious essence of desire. Notes on Gilles Deleuze's Anti-Oedipus)

Mark: 110/110 magna cum laude

## **Employment history:**

**Current position:** Postdoctoral research since 1/03/2024

Institution: Italian National Research Council Institute for Cognitive Sciences and Technologies (TN), Laboratory for Applied Ontology (LOA)

Supervisor: Dr. Roberta Ferrario

Project assignment: SMARTTEST (<https://sites.unimi.it/smartest/>)

**Previous position:** Postdoctoral research from 1/12/2021 to 31/10/2023

Institution: Italian National Research Council Institute for Cognitive Sciences and Technologies (TN), Laboratory for Applied Ontology (LOA)

Supervisor: Dr. Stefano Borgo

Project assignment:

OntoCommons(<http://www.loa.istc.cnr.it/index.php/projects/ontocommons/>)

## **Active memberships in scientific societies:**

Member of IAOA (International Association for Ontology and its Applications)

## **Personal skills:**

- Highly motivated and reliable post-doc researcher. Didactic, communication, and interpersonal skills, acquired during university seminars and teaching, teamwork research, participation in conferences and workshops, corporate training.
- Expertise in ontology editors (Protégé), Ontology Web Language (OWL) conceptual modelling languages (E-R, UML), and First-Order Logic (FOL)
- Certificate skills in Python programming, Conda environments, and implementing machine learning and deep learning algorithms, obtained through attendance at the Advanced School in Artificial Intelligence (AS-AI) a.a. 2023/2024 promoted by ISTC-CNR. For more information, see <https://as-ai.org/>

## **Publications**

Biccheri, L., Borgo, S., & Ferrario, R. (2023). On the relation of instrumental dependence. In: N. Aussenac-Gilles, T. Hahmann, A. Galton, and M. M. Hedblom (Eds.) *Formal ontology in information systems: Proceedings of the 13th International Conference (FOIS 2023)*. *Frontiers in artificial intelligence and its applications* (vol. 377, pp. 47–61). IOS Press.

Biccheri, L., Ferrario, R., & Porello, D. (2020). *Needs and Intentionality: An Ontological Analysis and an Application to Public Services*. In B. Brodaric & F. Neuhaus (eds.), *Frontiers in Artificial Intelligence and Applications*. IOS Press

Biccheri, L. (2020) *Limiti e potenzialità dell'approccio fenomenologico di Zahavi e Gallagher allo studio della mente*. In ISONOMIA. Online philosophical journal of the University of Urbino

Biccheri, L., and Ferrario, R. (2019). *An analysis of the notion of need for the representation of public services*. In A. Barton, S. Seppälä, and D. Porello, editors, JOWO 2019 –The Joint Ontology Workshops, Proceedings of the Joint Ontology Workshops 2019, Episode 5: The Styrian Autumn of Ontology, Graz, Austria, September 23–25, 2019, volume 2518. CEUR Workshop Proceedings

## **Interventions at conferences and workshops**

*Enhancing trust in human-robot interaction: An integrated approach to knowledge representation in AI*. XX AISC Annual Conference: Hybrid Minds: Brain, Behavior and Society in the Age of AI, University of Rome ‘La Sapienza’, Roma, 18/09/2024

*Digital Twins for Human-Robot Interaction: Towards an Integrated Socio-technical Knowledge System*. Simulation of Probabilistic Systems for the Age of the Digital Twin. First Project Meeting, CUMO, Noto, 9-10. 2024

*On the Relation of Instrumental Dependence*. The 13th International Conference on Formal Ontology in Information Systems, FOIS 2023, Sherbrooke, Qc, Canada, 17-20/07/ 2023

*Instrumental Dependence*. Trust, Causality and Reliability: 1-Day Workshop, ISTC-CNR, Trento, 6/06/2023

*On the Relation of Instrumental Dependence*. Bias, Risk and Opacity in AI. Second Research Meeting, ISTC-CNR, Trento, 23/05/2023

*Needs and intentionality*. The 12th International Conference on Formal Ontology in Information Systems, FOIS 2021, Bolzano, Italy, 13-17/09/2021

*An ontological analysis of the notion of need*. XVI AISC Annual Conference: The Complexity of Cognition. Multidisciplinary Approaches to Human Behaviour, Roma Tre University, Roma, 11-13/12/2019

*Ontologia dei servizi. Un'applicazione al dominio Halley.* Company workshop, Halley informatica, Matelica, 05/12/2019

*An Analysis of the Notion of Need for the Representation of Public Services.* JOWO 2019 Episode V: The Styrian Autumn of Ontology September, Medical University of Graz, Graz. 23-25/09/2019

**Teaching activities :**

Academic Years: 2021-2022; 2022-2023; 2023-2024

Course on *Digital Humanities and Ontologies*

Department of Communication Sciences, Humanities and International Studies. University of Urbino Carlo Bo

**Content:** the course aims to provide a general overview of both theoretical and applied aspects entailed by the relationships between Ontologies and Digital Humanities. In particular, students are introduced to data modeling, as well as to computational methods, focusing on the employment of ontologies (e.g. CIDOC-CRM) in the field of cultural heritage.