

## Course proposal

# History and Philosophy of Symbiotic AI

### Teacher

Antonio Lombardi ( <https://www.uniba.it/it/docenti/antonio-lombardi> )

### Course description

The PhD course titled "History and Philosophy of Symbiotic AI" aims to provide a comprehensive orientation on the history of artificial intelligence, discussing its pivotal moments and the major philosophical issues it has raised. The course will explore topics such as the distinction between nature and technology, the ontological status of life, the nature of thinking and the uniqueness of human intelligence, human freedom versus determinism, and the potential for a technological Singularity. Special emphasis will be placed on the interplay between artificial intelligence, biology, and evolution, inspired by Licklider's seminal 1960 paper, which introduced the concept of human-computer symbiosis. This concept has evolved into the current discussion of Symbiotic Artificial Intelligence (SAI), a cutting-edge research frontier. The course will develop critical skills to investigate how the increasingly close coexistence of human and algorithmic intelligence is shaping our world. In the practical part of the course, specific problems posed by potentially symbiotic technologies, such as LLMs, recommendation systems, and virtual reality will be investigated.

### Course period

November 2024-March 2025

### SSD

INF/01, M-FIL/06

### Credits and Hours

3 credits, two of lectures (16 hours) and one of practice (15 hour), for a total of 31 hours.

- **First Module** (16 hours of lectures): History and Philosophical Problems of Artificial Intelligence
- **Second Module** Workshops (15 hours) on case studies (LLM, ChatGPT, recommendation systems, robotics, VR etc.)

### Exam Modality

- 1) Students present and discuss the main topics covered in the course, also referring to case studies.
- 2) Alternatively, Paper presentation. Students present the content of a number of papers suggested by the teacher. No groups are allowed.

### Teacher's CV

## Curriculum Vitae

### ANTONIO LOMBARDI

#### PERSONAL INFORMATION

Lombardi Antonio

ORCID: 0000-0003-1803-5423

Date of birth: 16/01/1991

Nationality: Italian

URL for web site: <https://www.uniba.it/it/docenti/antonio-lombardi> ; <https://uniba-it.academia.edu/AntonioLombardi>

#### • EDUCATION

2019                    PhD (Dissertation Title: *Una selezione spirituale? Hegel Darwin Ritchie*)  
Philosophy and History of Philosophy/ Department of Human Studies (DISUM),  
University of Bari/ Italy

#### • CURRENT POSITION

2023 - Today        RtdA (Research Fellow in History of Philosophy, FAIR PNRR project – Future Artificial  
Intelligence Research, an extended partnership promoted by the National Recovery and Resilience  
Plan)  
Department of Research and Innovation in Humanities (DIRIUM), University of Bari/ Italy

#### • PREVIOUS POSITIONS

2022                    Lecturer on Contract (Methodology of reading the philosophical text)  
Department of Research and Innovation in Humanities (DIRIUM), University of Bari/ Italy

2020 – 2021        Post-Doctoral Researcher  
Research topic: Idealism and Averroism (PRIN Averroism. History, Developments and  
Implications of a Cross-cultural Tradition: PRIN (National Research Project) 2017, Turin Unit,  
2017H8MWHR\_1)  
Department of Human Studies (StudiUm), University of Turin / Italy

Mar-May 2018      Visiting Postgraduate Research Student  
Research Topic: British Idealism and Darwinism  
Faculty of Business, Law and Politics / School of Politics and International Studies / Centre for  
Idealism and the New Liberalism (CINL), University of Hull / UK

#### • FELLOWSHIPS AND AWARDS

2020                    Regional Competition “3A3M”, Accademia Pugliese delle Scienze.  
Doctoral dissertation award

#### • TEACHING ACTIVITIES

2023-2024            Lecturer of the course "Ethical Acceptability of Symbiotic Artificial Intelligence" (First Module:  
Historical-philosophical fundamentals of AI: life, intelligence and machine and half of the Third  
Module: Workshops on case studies) at the Doctorate in Computer Science and Mathematics,  
University of Bari

Lecturer in the Transversal Skills course "Understanding Artificial Intelligence: for a conscious and

multi-disciplinary approach" (with Prof. Costantino Esposito) for PhD students in humanities at the University of Bari.

- Sep. 2023 Teaching Tutor – Philosophy, Doctoral Summer School “Citizenship and Freedom. Individual Decisions and Legal-Social Arrangements” of the Doctorate in Historical and Philosophical Heritage for Sustainable Innovation of the University of Bari “Aldo Moro” at the Academy Vivarium Novum (Villa Falconieri, Frascati) / Italy
- 2023 National Scientific Qualification (ASN) for the functions of Associate Professor in the Italian University (11/C5 - History of Philosophy)
- 2016-Today Assistant lecturer (History of Philosophy)  
Department of Humanistic Studies (DISUM), University of Bari/ Italy
- 2022 Lecturer on Contract (Methodology of reading the philosophical text)  
Department of Research and Innovation in Humanities (DIRIUM), University of Bari / Italy
- 2018 Postgraduate teaching tutor  
Department of Humanistic Studies (DISUM), University of Bari / Italy

• **ORGANISATION OF SCIENTIFIC MEETINGS**

- 2020 Conference Series: *Percorsi Tedeschi. Filosofia e Scienza*, organised by the Italian-German Cultural Association ‘Grimm’, under the Patronage of the Embassy of Germany and the Goethe Institute, Museo Civico di Foggia (Organisers: Myrtha de Meo-Ehlert, Antonio Lombardi) / Foggia, Italy
- 5/12/2019 International Workshop: *Sondaggi nella filosofia della natura moderna e contemporanea* (Organisers: C. Esposito, M. Suzuki, A. Lombardi) University of Bari (Department of Human Studies) – University of São Paulo / Bari, Italy, Complesso di Santa Teresa dei Maschi

• **REVIEWING ACTIVITIES**

- 2018 – 2023 Editorial Board Member, “Quaestio. Yearbook of the History of Metaphysics” (ISSN: 1379-2547)

I have served as an external reviewer for Palgrave Macmillan and for the following journals: “Elementa. Intersections between Philosophy, Epistemology and Empirical Perspectives” (Electronic edition ISSN 2785-4426 - Print edition ISSN 2785-4558); “Futuro Classico” (ISSN: 2465-0951)

• **MEMBERSHIPS OF SCIENTIFIC SOCIETIES**

- 2023 – Today Member, Research Network “FAIR (Future Artificial Intelligence Research) Foundation”

• **MAJOR COLLABORATIONS**

James Connelly, Colin Tyler, Christopher Fear / Topic: British Idealism / Faculty of Business, Law and Politics / School of Politics and International Studies / Centre for Idealism and the New Liberalism (CINL), University of Hull / UK

**Current grants**

<i>Project Title</i>	<i>Funding source</i>	<i>Amount (Euros)</i>	<i>Period</i>
LEAF (Linking Evolution, AI and Freedom)	University of Bari	10.000	February, 2023 – February, 2024

## LAST SCIENTIFIC ACTIVITIES:

For a general overview, please check my website: <https://uniba-it.academia.edu/AntonioLombardi>

## RECENT PUBLICATIONS

- 1) *Hegel: An Evolutionist?*, «Physis», 2024/1 (accepted, in publication)
- 2) *Il «fattore-Hume» nella metafisica di Bontadini. Filosofia dell'esperienza e problema della causalità*, in «Rivista di filosofia Neo-Scolastica», 2024 (accepted, in publication).
- 3) A. Carnevale, F. Lisi, **A. Lombardi**, *Exploring Ethical and Conceptual Foundations of Human-Centred Symbiosis with Artificial Intelligence*, CEUR Workshop Proceedings (CEUR-WS.org, **Free Open-Access**), ISSN: 1613-0073 <https://ceur-ws.org/Vol-3615/paper3.pdf>
- 4) *L'origine dell'io. Il "mistero" dell'intelligenza da Darwin al riduzionismo contemporaneo*, «Studium Ricerca», 3 (2023), pp. 651-684.
- 5) *Trascendenza del pensiero, impersonalità della coscienza. Hegel, T. H. Green e la critica di A. Seth Pringle-Pattison*, «Rosmini Studies», 10(2023), pp. 359-370.
- 6) *Sul "materialismo" di Averroè. Un bilancio da Renan a oggi*, in «Intersezioni», 2 (2022), ISSN 0393-8196, pp. 231-247.
- 7) *Dialettiche dell'immediato. Hegel, Gentile, Bontadini*, in «Quaderni di Inscibboleth», ISSN: 2279-9303; ISBN: 978-88-5529-310-5; ISBN e-book: 978-88-5529-335-8, XVII (2022), n. 1, numero monografico: "Dire l'immediato", a cura di A. Catalano, M. Ricciotti, pp. 35-55.
- 8) *Dallo specismo allo "specifismo". Controstoria dei diritti animali*, in L. Iannone, G. Malgieri, Roger Scruton, *Historica-Giubilei Regnani*, Roma 2022, pp. 203-232.
- 9) *Dall'intelletto potenziale alla coscienza eterna. Aristotelismo "averroizzante" e idealismo in Thomas Hill Green*, in «Quaestio-Annuario di storia della metafisica» (Xavier Zubiri e la metafisica contemporanea), ed. Paolo Ponzio, 21 (2021), ISBN 978-2-503-59528-3 ISSN 1379-2547, pp. 369-399.
- 10) *David George Ritchie. Un darwinista hegeliano nell'Inghilterra vittoriana*, Edizioni di Pagina, Bari 2020.