



STEFANO DE GIORGIS

AREAS OF INTEREST

- Knowledge Representation
- Conceptual Modeling
- Frame Semantics
- Cognitive Semantics
- Semantic Technologies
- Artificial Intelligence

TECHNICAL SKILLS

Python
Bash

OWL
RDF / RDFS
SPARQL

LANGUAGES

Italian

Native Speaker

English

Excellent Command

IELTS score: 8

French

Good Command

PHD THESIS REVIEWS

Originality:	Excellent
Methodologies Quality:	Excellent
Results Quality:	Excellent
Domain Knowledge:	Excellent

Rev 1 : Prof. Oliver Kutz:

"Exactly this kind of explainability-aware and semantics-aware research will be needed as a prerequisite to overcome limitations of various AI systems in the future."

Rev 2 : Prof. Luc Steels

"There is no doubt that this thesis satisfies the requirements for ph.D. I would propose to nominate this work for the best ph.D AI thesis of the year to EURAI."

CONTACTS

stefano.degiorgis@cnr.it
stefano.de.giorgis@gmail.com
+39 [REDACTED]



<https://github.com/StenDoipanni>



<https://www.linkedin.com/in/stefano-de-giorgis-a1223aba/>

<https://stendoipanni.github.io/>

ABOUT ME

I was born in Turin, Italy, in 1993.

I've always been interested in language and semantic technologies: these interests drove me to Alma Mater Studiorum, in Bologna, where I graduated in Linguistics Sciences.

I obtained my Ph.D. in Digital Humanities and Digital Knowledge, with the final overall evaluation of "Excellent".

I am currently a postdoctoral researcher at the Institute for Cognitive Sciences and Technologies - National Research Council (ISTC-CNR), Italy.

I collaborate with the Philosophy faculty of University of Bologna. My research is focused on knowledge representation of higher layers of meaning, such as values - as intended in ethics - with a strong commitment to cognitive semantics, structured via a frame semantics approach.

EDUCATION

2024 - Current

Post-doctoral researcher at Institute for Cognitive Sciences and Technologies - National Research Council (ISTC-CNR).

Main focus: *Bio-Socio-Cognitive Artificial Intelligence and Grounded World Models*

2023 - 2024

Post-doctoral researcher at University of Bologna - Philosophy department.

Main focus: *Formal value detection from text using ontology-based knowledge graphs.*

2019 - 2023

Alma Mater University of Bologna

PhD in Digital Humanities and Digital Knowledge:

"Ethics in the Flesh - Formalizing Moral Values with Frame Semantics and Embodied Cognition"

Supervisor: prof. Aldo Gangemi

2017 - 2019

Alma Mater University of Bologna

Master Degree in Italianistics and Linguistic Sciences:

"Post-truth, populism and knowledge extraction - A frame semantics approach to Indirect Hate Speech".

Supervisor: prof. Aldo Gangemi

Co-Supervisor: Dr. Mehwish Alam

110/110 with honors

EVENT MANAGEMENT AND ACADEMIC ROLES

2024

WISDOMS - Workshop on Integrating the Semantics of Data, Ontologies, Moral and cultural values and their Societal impact - ESWC 2024 Workshop - **Chair and Main Organizer**
CAOS 2024 - Cognition and Ontologies - FOIS 2024 Workshop - **Chair and Main Organizer**
ISWS 2024 - International Semantic Web Summer School - **Head Assistant Tutor**

2023

Shifting Tides: Norms, Ethics, and Values in AI-infused Society - **Local Organizer and Speaker**
ISWS 2023 - International Semantic Web Summer School - **Head Assistant Tutor**
ISWS 2023 - International Semantic Web Summer School - **Gala Dinner Speech Invited Keynote**
CAOS 2023 - Cognition and Ontologies - **Chair**
ISD7 2023 - Seventh Image Schema Day - **PC Member**
ExICE 2023 - Extended Intelligence for Cultural Engagement - **PC Member**

2022

ISWS 2022 - International Semantic Web Summer School - **Assistant Tutor**
JOWO 2022 - Joint Workshop of Ontologies - **PC Member**
ICCC 2022 - International Conference of Computational Creativity - **PC Member**
IAOA - International Association for Ontology and its Applications - **Member**
AISC 2022 - Italian Association for Cognitive Sciences - **PC Member**

2021

WOP 2021 - Workshop on Ontology Design and Patterns - **PC Member**

2019

ISWS 2019 - International Semantic Web Summer School - **Participant**

PROJECTS INVOLVEMENT

I'm working on the newly started **FAIR - Future of Artificial Intelligence Research** European Project n° PE00000013, in particular on the "Bio-Socio-Cognitive AI" working package.

I've been involved in the **SPICE H2020 European Project** n° 870811.

I designed and modeled several ontologies for the SPICE linked data hub, in particular I'm the responsible for the ValueNet ontology network, dedicated to the formalisation of moral and cultural values.

In addition to the above mentioned scientific publication I co-authored 4 SPICE deliverables curating the parts dedicated to ValueNet description and implementation, and developed an automatic value detector that is actively contributing in enriching data from SPICE partner's cultural heritage institutions.

I've been invited to present my work at the kickoff meeting of the **VALAWAI project**, focused on AI for moral values and awareness, and I bridged contacts between the SPICE project and the **VAST project**, focused on representing Values Across Space and Time.

TEACHING AND PROJECT SUPERVISION

Master Thesis Co-Supervision in Information Technologies and Knowledge Management, **"Emotions and their Semantic Context: Methods and Approaches for Modelling the Emotional Experience in Literary Texts"**

Candidate: Sara Coppini

Supervisor: prof. Aldo Gangemi

Co-supervisor: Stefano De Giorgis

Students' Tutor and Project Supervisor for the Knowledge Representation and Knowledge Extraction course 2024 at Digital Humanities master Degree.

Students' Tutor and Project Supervisor for the Knowledge Engineering course 2023 at AI master Degree.

ACADEMIC PUBLICATIONS

2024

Lazzari, N., De Giorgis, S., Gangemi, A., Presutti, V., "**Sandra--A Neuro-Symbolic Reasoner Based On Descriptions And Situations**", International Conference on Advanced Information Systems Engineering (CAiSE). Cham: Springer Nature Switzerland (pp. 3-15). 2023.

De Giorgis, S., Gangemi, A., "**EFO: the Emotion Frame Ontology**", Under Review at EKAW 2024.

Ciroku F., De Giorgis S., Gangemi A., Pandiani D.S., Presutti V., "**Automated Multimodal Sensemaking: Ontology-Based Integration of Linguistic Frames and Visual Data**", Computers in Human Behavior, 2024.

2023

De Giorgis S., Gangemi A., "**That's All Folks: a KG of Values as Commonsense Social Norms and Behaviors**", arXiv preprint arXiv:2303.00632, 2023.

Bulla, L., De Giorgis, S., Gangemi, A., Lucifora, C., & Mongiovi, M., "**Comparing User Perspectives in a Virtual Reality Cultural Heritage Environment**", International Conference on Advanced Information Systems Engineering (CAiSE). Cham: Springer Nature Switzerland (pp. 3-15). 2023.

De Giorgis, S., Gangemi, A., "**Emotions, Money and Other Amorphous Things. An initial exploration of Substance**", Proceedings of 7th Image Schema Day, 2023.

2022

De Giorgis S., Gangemi A., Gromann D., "**ImageSchemaNet: Formalizing embodied commonsense knowledge providing an imageschematic layer to framester.**", Semantic Web Journal, 2022.

De Giorgis S., Gangemi A., Damiano R., "**Basic Human Values and Moral Foundations Theory in ValueNet Ontology.**" International Conference on Knowledge Engineering and Knowledge Management (EKAW). Springer, Cham, 2022. [[Best Paper Nomination](#)]

Asprino L., Bulla L., De Giorgis S., Gangemi A., Marinucci L. Mongiovi M., "**Uncovering Values: Detecting Latent Moral Content from Natural Language with Explainable and Non-Trained Methods.**" Proceedings of Deep Learning Inside Out (DeeLIO 2022): The 3rd Workshop on Knowledge Extraction and Integration for Deep Learning Architectures. 2022.

De Giorgis, S., Gangemi A., Gromann D., "**The Racing Mind and the Path of Love: automatic extraction of image schematic triggers in knowledge graphs generated from natural language.**" Proceedings of Sixth Image Schema Day, 2022.

De Giorgis, S., Gangemi A., "**Introducing ODIN: Ontological Design grounded in Image-schematic knowledge**" Proceedings of the 13th edition of Workshop on Ontology Design and Patterns (WOP), 2022.

De Giorgis S., Gangemi A., Gromann D. "**Introducing ISAAC: the Image Schema Abstraction And Cognition Modular Ontology**" Proceedings of Joint Ontology Workshop - Cognition and Ontologies (JOWO - CAOS), 2022.

Pomarlan M., Hedblom M., De Giorgis S., Diab M., Tsiogkas N. "**Thinking in front of the box: Towards intelligent robotic action selection for navigation in complex environments using image-schematic reasoning**", Proceedings of Joint Ontologies Workshop - Ontologies for Robotics (JOWO- RobOntics) 2022.

De Giorgis S., Gangemi A., "**Exuviae: a conceptual exoskeleton for formal epistemological comparison.**" Graphs and Networks in the Humanities (GraphHum), 2022.

2 0 2 1

De Giorgis S., Gangemi A., "**Making Image Schema Logic viable for Empirical Cognitive Robotics.**", AISC - Italian Association for Cognitive Sciences, 2021.