Giovanni De Gasperis CV

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Giovanni De Gasperis is Assistant Professor in Information Processing Systems, Department of Information Engineering Computer Science and Mathematics, at University of L'Aquila, since October 1st, 2007.

Received the "*Dottorato di Ricerca*" (PhD) in Electronics Engineering in 1995 from University of L'Aquila, were he also graduated in Electronic Engineering in 1991.

He is lecturer at:

- his own Department of the course "*Laboratory of Intelligent Systems*", within the Master of Computer Science, about virtual cognitive robotics and cloud computing;
- the Department of Human Studies of the course "*Information Processing Systems*" within the degree course in "Philosophy and Theory of Communication Processes", about the foundation of computer science and computer systems technology;
- the Department of Human Studies of the course "*Information Processing Systems M*" within the Master of Science "Theory of Communication", about methodologies for formal representation of knowledge and the main techniques of computational linguistics including text annotation and text mining.

At the same university in the years 2010-2013 he has been delegated as Chancellor for Technological innovation in ICT, distance Learning e-learning and ECDL, development of management services for the University including applications relating to electronic documentation protocol and automation of the student secretariats services.

He has been Visiting Lecturer funded by the EU Erasmus Teaching Program at:

- University of Westminster, London, UK in November 2012
- University of Salamanca, Salamanca, ES, in March 2014

He has work experience abroad during the period 1995-1998 as a Postdoctoral fellow in United States, at the University of Texas MD Anderson Cancer Center, Houston, TX, and during his period of study and research for his Ph.D. in 1992 at University of Glasgow, Scotland, UK.

His current (2015) research interests include:

- Multi Agent Systems (MAS) applications on Complex Event Processing, Logic Programming languages and tools, Answer Set Programming; development of techniques, heuristic algorithms, applications of MAS with preference management in the construction of DCMS (Distributed Control and Monitoring Systems), with applications to energy savings in modern buildings .
- use of innovative technologies of home automation for the optimization of resources: intelligent management of prosumer nodes and their aggregates in Smart Grids of Energy and Information.
- advanced ICT-based teaching methods, virtual learning through metaverses, immersive virtual worlds, user interface based on pseudo-natural language systems, question answering systems, digital assistants, Human-machine multimodal interaction, methods of knowledge representation, eLearning.

He is currently *project coordinator* of the SMART-CMS industrial research project in collaboration with the company SPEE, IT.

He is currently *software coordinator* of the following active projects:

- DALI multi agent system framework Framework, based on Prolog and Python, available at GitHub web site.
- TalTac V3, a tool for text mining and computational linguistics based on Python/PyPy.
- Relysoft Reliability Engineering Tool in collaboration with the company Italconsul, IT
- SuperHimalaya Distributed Supervision tool for event driven ambient security in collaboration with the company SPEE, IT

He has been is part in the leading group of the european FP7 STREP research project TERENCE (2010-2013), were a technology enhanced learning tool for teachers and children has been developed to help poor comprehenders to learn to read. He is currently IT coordinator of the EMICVL Tempus project and virtual object repositories organization available at GitHub web site.

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Publications 2009-2015

International Journals:

1. CAIANIELLO P, COSTANTINI S, DE GASPERIS G, GIMENEZ DE LORENZO M (2013). Application of Hybrid Agents to Smart Energy Management of a Prosumer Node. INTERNATIONAL JOURNAL OF INTERACTIVE MULTIMEDIA AND ARTIFICIAL INTELLIGENCE, vol. 2, p. 60-66, ISSN: 1989-1660, doi: 10.9781/ijimai.2013.247

2. LANDRO D, DE GASPERIS G, MACCHIARELLI G. (2013). Collaborative system for web seminars, distance learning sessions and virtual labs in biomedicine. INTERNATIONAL JOURNAL OF TECHNOLOGY ENHANCED LEARNING, vol. 5, p. 198-212, ISSN: 1753-5255, doi: 10.1504/IJTEL.2013.059491

3. COSTANTINI S, DE GASPERIS G, PROVETTI A, TSINTZA P (2012). A Heuristic Approach to Proposal-Based Negotiation with Applications in Fashion Supply Chain Management. MATHEMATICAL PROBLEMS IN ENGINEERING, ISSN: 1024-123X

4. DE GASPERIS G (2010). Building an AIML Chatter Bot Knowledge-Base Starting from a FAQ and a Glossary. JE-LKS. JOURNAL OF E-LEARNING AND KNOWLEDGE SOCIETY, vol. 2, p. 75-83, ISSN: 1826-6223

Conference and Workshop Papers

1. COSTANTINI S, DE GASPERIS G, NAZZICONE G. (2015). Exploration of Unknown Territory via DALI Agents and ASP Modules. DCAI 2015: 285-292, Salamanca, ES, June 2015.

2. MUZI F, GIMENEZ DE LORENZO M; DE GASPERIS G. (2015) A Multiagent Saver for the Automatic Management of HVAC Systems. EEEIC 2015, Rome, IT, May 2015.

3. MUZI F, GIMENEZ DE LORENZO M; DE GASPERIS G. (2015) A Predictive Model for the Automated Management of Conditioning Systems in Smart Buildings. UkSim 2015, Cambridge, UK, March 2015.

4. COSTANTINI S, DE GASPERIS G. (2014): Runtime Self-Checking via Temporal (Meta-)Axioms for Assurance of Logical Agent Systems. CILC 2014, Torino, IT: 241-255

5. LANDRO D, STIFANO G, DE GASPERIS G, MACCHIARELLI G. (2014). An adaptive learning agent integrated in a collaborative portal for advanced training in the biomedical field. FUSION 2014, Salamanca, ES: 1-7

6. JUAN SANCHEZ MARTIN A , DE LA PRIETA PINTADO F, DE GASPERIS G. (2014). Fixing and evaluating texts: Mixed text reconstruction method for data fusion environments. FUSION 2014, Salamanca, ES: 1-6

7. COSTANTINI S, DE GASPERIS G, FLORIO N, ZUPPELLA C. (2013). An ASP-based System for Preference Handling and Planning. CILC 2013, Catania, IT: 253-257

8. CAIANIELLO P, COSTANTINI S, DE GASPERIS G, FLORIO N, GOBBO F. (2013). Application of Hybrid Agents to Smart Energy Management of a Prosumer Node. DCAI 2013, Salamanca, ES: 597-607

9. SPEZIALETTI M, AVOLA D, PLACIDI G, DE GASPERIS G. (2012). Movement analysis based on virtual reality and 3D depth sensing camera for whole body rehabilitation. CompIMAGE 2012: 367-372

10. GORRINO A, DE GASPERIS G. (2012). Virtual Laboratory for the Training of Health Workers in Italy. DCAI 2012, Salamanca, ES: 41-48

11. MUZI F, GIMENEZ DE LORENZO M, DE GASPERIS G. (2012). Intelligence Improvement of a "Prosumer" Node through the Predictive Concept. EMS 2012, Malta: 311-316

12. BEVAR V, COSTANTINI S, TOCCHIO A, DE GASPERIS G. (2012). A Multi-Agent System for Industrial Fault Detection and Repair. PAAMS 2012, Salamanca, ES: 47-55

13. DE GASPERIS G, BEVAR V, COSTANTINI S, TOCCHIO A, PAOLUCCI A. (2012). Demonstrator of a Multi-Agent System for Industrial Fault Detection and Repair. PAAMS 2012, Salamanca, ES: 237-240

14. COSTANTINI S, DE GASPERIS G. (2012). Complex Reactivity with Preferences in Rule-Based Agents. RuleML 2012, Montpellier, FR: 167-181

Parts in Books or Collections

1. DE GASPERIS G, CHIARI I, FLORIO N. (2013). AIML Knowledge Base Construction from Text Corpora. Artificial Intelligence, Evolutionary Computing and Metaheuristics 2013: 287-318

Open Source software repositories:

1. DE GASPERIS G, NAZZICONE G, COSTANTINI S. (2014). DALI Multi Agent System Framework. DOI: 10.5281/zenodo.11198