

# Francesco Gallo

· SOFTWARE ENGINEER ·

Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica  
Università dell'Aquila - Via Vetoio, SNC - Località Coppito - Blocco 0

✉ francesco.gallo@univaq.it | 🏠 people.disim.univaq.it/francesco.gallo

“Dogmas are toys that amuse only children incapable of reasoning.”

## Research interests

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- Self-Adaptive Systems
- Internet(Web) of Things
- System Biology
- Service Oriented Architecture
- Blockchain

## Current Positions

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April 2017 **Post Doc researcher**, GAUSS - Controllo di Sistemi Non Pianificati e Adattivi project - PRIN MIUR '15

L'Aquila

## Education

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### Facoltà di Scienze MM. FF. NN (Faculty of Sciences) - University of L'Aquila

L'Aquila, Italy

PHD IN COMPUTER SCIENCE

Oct. 2009 - April 04, 2014

- *Phd Thesis*: Proteus: A framework to specify and to implement reconfiguration plan
- *Supervisor*: dr. Antiniscia Di Marco

### Facoltà di Scienze MM. FF. NN (Faculty of Sciences) - University of L'Aquila

L'Aquila, Italy

MASTER DEGREE IN COMPUTER SCIENCE

Nov. 1999 - March 26, 2009

- *Thesis*: Tecniche di modellazione ed analisi di sistemi biologici
- *Supervisor*: dr. Antiniscia Di Marco

### Istituto Tecnico Industriale Statale "G. Marconi", Campobasso

L'Aquila, Italy

MATURITÀ TECNICA (HIGH-SCHOOL DEGREE) - 52/60

Sep. 1991 - July 1996

## Skills

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**Programming** Python, JAVA, C, LaTeX, Scala, Node.js, R  
**Web** Django with Python, Express with Node.JS, HTML5  
**Languages** Italian, English

## Research Experiences and Project

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### MIUR '15

Programma PRIN (Progetti di ricerca  
di Rilevante Interesse Nazionale)

GAUSS - CONTROLLO DI SISTEMI NON PIANIFICATI E ADATTIVI

2017 - 2020

- Member of University of L'Aquila (UniAq) Group
  - Task: Research and develop
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## H2020 EU Project, 2015 - 2018 - Research and Innovation Actions: ICT9 - 2014: Tools and Methods for Software Development

European Project

CHOREVOLUTION PROJECT - AUTOMATED SYNTHESIS OF DYNAMIC AND SECURED CHOREOGRAPHIES FOR THE FUTURE INTERNET

2015 - 2018

- Member of University of L'Aquila (UDA) Group
- Task: deliverable author and reviewer - components developer

### Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica - DISIM

L'Aquila, Italy

RESEARCHER FOR "IDEAS - PROGETTAZIONE E EVOLUZIONE INTEGRATA DI SISTEMI ADATTIVI"- PRIN MIUR '12

Apr. 2015 - Exp. March 2017

- Researched means to project and develop adaptive systems.

### Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica - DISIM

L'Aquila, Italy

SCHOLARSHIP FOR "IMPLEMENTAZIONE DI UN FRAMEWORK PER LA RICONFIGURAZIONE DI SISTEMI SOFTWARE A RUN-TIME"

March 2014 - Exp. Febr. 2015

- Researched means to project and develop self-adaptive systems.

### Dipartimento di Ingegneria e Scienze dell'Informazione e Matematica - DISIM

L'Aquila, Italy

SCHOLARSHIP FOR "LINGUAGGI PER LA RICONFIGURAZIONE DI SISTEMI SOFTWARE A RUN-TIME"

March 2014 - Exp. Febr. 2015

- Researched means to project and develop self-adaptive systems.

### Computer Communications Department, Middlesex University

London, UK

DOCTORAL GUEST STUDENT - COLLABORATION WITH DR. LEONARDO MOSTARDA

Dec. 10, 2012 - Exp. Dec. 21, 2012

- Self-Adaptive systems based on wireless sensor network

### School of Engineering and Information Sciences, Middlesex University

London, UK

DOCTORAL GUEST STUDENT - COLLABORATION WITH DR. FRANCO RAIMONDI

Marc. 2012 - Exp. Jun. 2012

- Implementation of Proteus (a reconfiguration planner for adaptive systems).

### Computer Communications Department, Middlesex University

London, UK

DOCTORAL GUEST STUDENT - COLLABORATION WITH DR. FRANCO RAIMONDI, DR. LEONARDO MOSTARDA

Jun. 2011 - Exp. Sep. 2011

- Prototypal definition of Proteus (a reconfiguration planner for adaptive systems).

## Doctoral schools and courses followed

### Dagstuhl School

Dagstuhl, Germany

SCHOOL

Jan. 16, 2015 - Exp. Jan. 23, 2015

- Model-driven Algorithms and Architectures for Self-Aware Computing Systems - [https://www.dagstuhl.de/no\\_cache/en/program/calendar/semhp/?semnr=15041](https://www.dagstuhl.de/no_cache/en/program/calendar/semhp/?semnr=15041)

### Carlo Bo - University of Urbino

Bertinoro (FC), Italy

SCHOOL

Jun 17, 2013 - Exp. Jun 22, 2013

- 13th International School on Formal Methods for the Design of Computer, Communication and Software Systems: Dynamical Systems <http://www.sti.uniurb.it/events/sfm13ds/>

### J. T. Schwartz International School for Scientific Research

Lipari (ME), Italy

SCHOOL

July 10, 2010 - Exp. July 17, 2010

- Biology and Computer Science: Modelling and Computing - Computer Science Series <https://liparischool.it/LipariSchool/CS/previousedition/edition2010cs.htm>

### British Institute

L'Aquila, Italy

ESOL CERTIFICATE

Sep. 2008 - Exp. April 2009

- Level A2 WAYSTAGE

### University of L'Aquila

L'Aquila, Italy

TRAINING MODULE

Sep. 2006

- Progettazione e gestione di nodi intelligenti per le reti di nuova generazione

- Progettazione Software per componenti

## Work Experiences

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### Everett S.p.a. - [www.everett.nl](http://www.everett.nl)

*Pescara, Italy*

STAGE

*May 2009 - Exp. July 2009*

- Customization and installation tool sun, and application developer by open-source technology.

### Micron Technology Italia, [www.micron.com/italy](http://www.micron.com/italy)

*Avezzano(AQ), Italy*

MEMBER OF TRAINING AND DOCUMENTATION GROUP

*Feb. 2006 - Exp. May 2006*

- Design and implementation of electronic technical documentation in the context of semiconductor manufact.

### Comando Militare Regionale "Molise"

*Campobasso, Italy*

MEMBER OF PUBLIC RELATIONS OFFICE

*April 1999 - Exp. Dec. 1999*

- Design and implementation of electronic documentation, development of applications for office management, collaboration in the management of military demonstrations for promotion and recruitment.

## Teaching and Thesis

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### Laboratorio di Fondamenti di Programmazione - Prof.ssa Monica Nesi

*Undergraduate Program in  
Computer Science - L'Aquila*

TUTORING

*A.A 2019 - 2020 - 20 hours*

- Laboratory Support - Java Language

### Fondamenti di Informatica - Prof. Gabriele Di Stefano

*Undergraduate Program in  
Information Engineering - L'Aquila*

TUTORING

*A.A 2019 - 2020 - 30 hours*

- Laboratory Support - Python Language

### Elementi di Informatica

*Undergraduate Program in Applied  
Psychological Sciences - L'Aquila*

LECTURER

*A.A 2018 - 2019 - 32 hours*

- Docente a Contratto

### Laboratorio di Fondamenti di Programmazione - Prof.ssa Monica Nesi

*Undergraduate Program in  
Computer Science - L'Aquila*

TUTORING

*A.A 2018 - 2019 - 20 hours*

- Laboratory Support - Java Language

### Fondamenti di Informatica - Prof. Gabriele Di Stefano

*Undergraduate Program in  
Information Engineering - L'Aquila*

TUTORING

*A.A 2018 - 2019 - 30 hours*

- Laboratory Support - Python Language - Cultore della Materia per A.A 2018-2019

### Corso di BioInformatica - dr. Antinisa Di Marco, dr. Pasquale Caianiello

*Master Program Computer Science -  
L'Aquila*

SEMINAR

*A.A 2014 - 2015*

- Laboratory Support

### Sistemi Informativi per la sanità e alfabetizzazione informatica

*Roma, Italy*

LECTURER

*Oct. 2013 - Dec. 2013*

- ICT Health 2013

### **Bachelor Thesis - Marco D'Ettore**

*L'Aquila, Italy*

Co-SUPERVISOR

- Realizzazione di un database aperto per proteine ribosomiali

### **Bachelor Thesis - Pietro De Luca**

*L'Aquila, Italy*

Co-SUPERVISOR

- Acquisizione in tempo reale diagnostica veicoli nell'ambito del progetto BusOnAir

### **Bachelor Thesis - Francesco Gallucci**

*L'Aquila, Italy*

Co-SUPERVISOR

- Realizzazione di Sistemi di Tracing real time mediante piattaforma Arduino

### **Bachelor Thesis - Andrea Lisi**

*L'Aquila, Italy*

Co-SUPERVISOR

- Acquisizione dati mediante tecnologia Near Field Communication e piattaforma hardware Arduino Yún

## **Extracurricular Activity**

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### **Software Technologies: Applications and Foundations (STAF)**

*L'Aquila, Italy*

MEMBER

*July 2015*

- Support Staff.

### **Smartly S.r.l**

*L'Aquila - Italy*

CHAIRMAN

*May 2014 - PRESENT*

### **Associazione Nuova Acropoli**

*L'Aquila, Italy*

MEMBER

*May 2011 - Oct. 2013*

- Humanitarian aid and civil protection course.

### **23rd IEEE/ACM International Conference on Automated Software Engineering**

*L'Aquila, Italy*

MEMBER

*Sep. 2008*

- Support Staff.

## **Awards**

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### INTERNATIONAL

2010 **1st Place - Best Poster**, Learning from the Cell life-cycle: a self-adaptive paradigm - ECSA 2010

*Copenhagen,  
Denmark*

### DOMESTIC

2011 **1st Place**, Business Plan Competition 2010/2011 - Name of the proposed project: BusOnAir

*L'Aquila, Italy*

## **Publications**

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### **INTERNATIONAL WORKSHOP ON GOVERNING ADAPTIVE AND UNPLANNED SYSTEMS OF SYSTEMS - GAUSS 2019**

*Berlin, Germany*

AUTHOR

*October 28 - 31, 2019*

- Marco Autili, Francesco Gallo, Paola Inverardi, Claudio Pompilio, Massimo Tivoli  
**Introducing Trust in Service-oriented Distributed Systems through Blockchain**

### **i-Cities 2019**

*Pisa, Italy*

AUTHOR

*September 18 - 20, 2019*

- Marco Autili, Francesco Gallo, Claudio Pompilio, Massimo Tivoli  
**Synthesis of Collaborative Systems for Smart Cities**
-

## i-Cities 2019

*Pisa, Italy*

AUTHOR

*September 18 - 20, 2019*

- Ludovico Iovino, Michele Flammini, Martina De Sanctis, Francesco Gallo  
**BusOnAir: 10 Years Challenge**

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## Future Internet 2019 — Open Access Journal

AUTHOR

2019

- Marco Autili, Amleto Di Salle, Francesco Gallo, Claudio Pompilio, Massimo Tivoli  
**A Choreography-Based and Collaborative Road Mobility System for L'Aquila City**

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## 21st International Conference on Coordination Models and Languages - COORDINATION 2019

*Copenhagen, Denmark*

AUTHOR

*June 17 - 21, 2019*

- Marco Autili, Amleto Di Salle, Francesco Gallo, Claudio Pompilio, Massimo Tivoli  
**CHOReVOLUTION: automating the realization of highly-collaborative distributed applications**

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## 34rd Annual ACM Symposium on Applied Computing - SAC 2019

*Limassol, Cyprus*

AUTHOR

*April 08 - 12, 2019*

- Marco Autili, Amleto Di Salle, Francesco Gallo, Claudio Pompilio, Massimo Tivoli  
**Aiding the Realization of Service-oriented Distributed Systems**

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## 5th International Workshop on Model-Driven Engineering for Component-Based Software Systems (ModComp 2018) co-located with MODELS 2018

*Copenhagen, Denmark*

AUTHOR

*October 14, 2018*

- Marco Autili, Amleto Di Salle, Francesco Gallo, Claudio Pompilio, Massimo Tivoli  
**On the Model-driven Synthesis of Adaptable Choreographies** - doi

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## 12th European Conference on Software Architecture: Companion Proceedings Article No. 20 - ECSA '18

*Madrid, Spain*

AUTHOR

*September 24 - 28, 2018*

- Marco Autili, Amleto Di Salle, Francesco Gallo, Claudio Pompilio, Massimo Tivoli  
**On the model-driven synthesis of evolvable service choreographies** - doi

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## 33rd Annual ACM Symposium on Applied Computing - SAC 2018

*Pau, France*

AUTHOR

*April 09 - 13, 2018*

- Marco Autili, Amleto Di Salle, Francesco Gallo, Claudio Pompilio, Massimo Tivoli  
**Model-driven adaptation of service choreographies** - doi

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## Edited by professionaldreamers, Springer, pp. 117-130 - Vol. 1.

*L'Aquila, Italy*

AUTHOR

2018

- Francesco Gallo, Ludovico Iovino, Enzo Falco, Ivano Malavolta, Adam Radzinski, Stefano Ruberto  
**ICTs and public transport in the dispersed city in Envisaging L'Aquila. Strategies, spatialities and sociabilities of a post-disaster city** - Link

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## Companion of the 2018 ACM/SPEC International Conference on Performance Engineering - ICPE '18

*Berlin, Germany*

AUTHOR

*April 09 - 13, 2018*

- Vittorio Cortellessa, Antiniscia Di Marco, Daniele Di Pompeo, Francesco Gallo, Stefano Pace, Luigi Pomante, Walter Tiberti  
**Energy-Driven Reconfiguration of Applications for Wireless Sensor Networks** - doi

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## Journal of Urban Technology, 24(4), pp. 1-23

AUTHOR

2017

- Enzo Falco, Ivano Malavolta, Adam Radzinski, Stefano Ruberto, Ludovico Iovino, Francesco Gallo  
**Smart City L'Aquila: An Application of the Infostructure Approach to Public Urban Mobility in a Post-Disaster Context** - doi

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## International Conference on the Science of Electrical Engineering - ICSEE 2016

*Eilat, Israel*

AUTHOR

*Nov. 16 - 18, 2016*

- Dajana Cassioli, Antiniscia Di Marco, Francesco Gallo, Stefano Pace, Luigi Pomante, Claudia Rinaldi  
**VISION: Video-oriented UWB-based intelligent ubiquitous sensing** - doi

## Software Technologies: Applications and Foundations - STAF 2016

Vienna, Austria

AUTHOR

July 4-8, 2016

- Amleto Di Salle, Francesco Gallo, Claudio Pompilio  
**Composition of Advanced (micro)Services for the Next Generation of the Internet of Things** - doi

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## THE AMERICAN JOURNAL OF PATHOLOGY, vol. 186, p. 17

AUTHOR

2016

- Francesco Gallo, Antiniscia Di Marco, Valentina Mastroiaco, Pasquale Caianiello, Francesca Zazzeroni, Edoardo Alesse, Alessandra Tessitore  
**new bioinformatics approach to identify target genes for dysregulated micrnas in a chemically-induced hepatocarcinoma mouse model** - doi

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## BMC Bioinformatics 2015, 16:408

AUTHOR

2015

- Filippo Del Vecchio, Francesco Gallo, Antiniscia Di Marco, Valentina Mastroiaco, Pasquale Caianiello, Francesca Zazzeroni, Edoardo Alesse, Alessandra Tessitore  
**Bioinformatics approach to predict target genes for dysregulated microRNAs in hepatocellular carcinoma: study on a chemically-induced HCC mouse model** - doi

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## International Conference on Software Engineering and Formal Methods - SEFM 2015, pp 312-323

York, UK

AUTHOR

Sept 7 - 11, 2015

- Amleto Di Salle, Francesco Gallo, Alexander Perucci  
**Dependable Composition of Software and Services in the Internet of Things: A Biological Approach** - doi

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## International Conference on Software Engineering and Formal Methods - SEFM 2015, pp 312-323

York, UK

AUTHOR

Sept 7 - 11, 2015

- Amleto Di Salle, Francesco Gallo, Alexander Perucci  
**Towards Adapting Choreography-Based Service Compositions Through Enterprise Integration Patterns** - doi

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## Software Engineering for Resilient Systems pp 1-15 - SERENE 2015

Paris, France

AUTHOR

Sept 7 - 8, 2015

- Marco Autili, Amleto Di Salle, Francesco Gallo, Alexander Perucci, Massimo Tivoli  
**Biological Immunity and Software Resilience: Two Faces of the Same Coin?** - doi

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## International Conference on Sensor Networks - Demo@SENSoRNETS 2015

Anger, France

AUTHOR

Feb. 11 - 13, 2015

- Dajana Cassioli, Antiniscia Di Marco, Francesco Gallo, Stefano Pace, Luigi Pomante, Claudia Rinaldi  
**VISION: Video-oriented UWB-based Intelligent Ubiquitous Sensing Demo of the Video-oriented Intelligent Sensing**

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## International Conference on Advanced Information Networking and Applications - AINA '13

Barcelona, Spain

AUTHOR

Mar. 25 - 28, 2013

- Antiniscia Di Marco, Francesco Gallo, Orhan Gemikonakli, Leonardo Mostarda, Franco Raimondi  
**Implementing Adaptation and Reconfiguration Strategies in Heterogeneous WSN** - doi

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## Adaptive and Self-Adaptive Systems and Applications - ADAPTIVE 2012

Barcelona, Spain

AUTHOR

Mar. 25 - 28, 2013

- Antiniscia Di Marco, Francesco Gallo, and Franco Raimondi  
**PROTEUS: A Language for Adaptation Plans** - doi

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## Self-Adaptive and Self-Organizing Systems - SASO 2010, pp: 269-270

Budapest, Hungary

AUTHOR

27 Sept.-1 Oct. 2010

- Antiniscia Di Marco, Francesco Gallo, Paola Inverardi, Rodolfo Ippoliti  
**Towards a Stem Architecture Description Language for Self-Adaptive Systems** - doi

- Antinisca Di Marco, Francesco Gallo, Paola Inverardi, Rodolfo Ippoliti  
**Learning from the cell life-cycle: a self-adaptive paradigm** - doi

## Program Committees/reviewer

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2020	<b>Organizing Committee Member</b> , 2nd International Workshop on Automated and verifiable Software sYstem DEvelopment - ASYDE 2020	<i>Amsterdam, The Netherlands</i>
2019	<b>Organizing Committee Member</b> , INTERNATIONAL WORKSHOP ON GOVERNING ADAPTIVE AND UNPLANNED SYSTEMS OF SYSTEMS - GAUSS 2019	<i>Berlin, Germany</i>
2019	<b>Session-Chair</b> , INTERNATIONAL WORKSHOP ON GOVERNING ADAPTIVE AND UNPLANNED SYSTEMS OF SYSTEMS - GAUSS 2019	<i>Berlin, Germany</i>
2019	<b>Program Committee</b> , Workshop on Engineering Collective Adaptive Systems - eCAS 2019	<i>Umeå, Sweden</i>
2018	<b>Reviewer</b> , Applied Sciences — Open Access Journal	<i>International Journal</i>
2018	<b>Reviewer</b> , JSAN — Open Access Journal	<i>International Journal</i>
2018	<b>Reviewer</b> , Sensors — Open Access Journal	<i>International Journal</i>
2018	<b>Program Committee</b> , Workshop on Engineering Collective Adaptive Systems - eCAS 2018	<i>Trento, Italy</i>
2018	<b>Editor</b> , International Journal of Emerging Research and Solutions in ICT - ERSICT	<i>International Journal</i>
2015	<b>Web-Chair</b> , 10th International Symposium on Software Engineering for Adaptive and Self-Managing Systems - SEAMS 2015	<i>Firenze, IT</i>
2015	<b>Sub-Reviewer</b> , Formal Engineering approaches to Software Components and Architectures - FESCA 2015	<i>London, UK</i>
2013	<b>Sub-Reviewer</b> , Fundamental Approaches to Software Engineering - FASE 2013	<i>Rome, Italy</i>
2012	<b>Session-Chair</b> , Adaptive and Self-Adaptive Systems and Applications - ADAPTIVE 2012	<i>Nice, France</i>