

Curriculum Vitae - VITTORIO CORTELLESA
(last update: 2022)

PERSONAL INFORMATION

Role: Full Professor (since March 2018)

Employer: Università degli Studi dell'Aquila, Department of Computer Engineering and Science, and Mathematics (DISIM)

Education: PhD in Computer Science, October 1995, Università di Roma Torvergata

MAIN POSITIONS COVERED

Long term (more than 6 months)

(March 2005 – February 2018)

Associate Professor - Università degli Studi dell'Aquila, Department of Computer Science

(November 2001 – February 2005)

Researcher - Università degli Studi dell'Aquila, Department of Computer Science

(January 2000 - October 2001)

Research Assistant Professor - Lane Computer Science and Electrical Engineering Department, College of Engineering and Mineral Resources, West Virginia University, Morgantown, WV (USA)

(April 2000 - October 2001)

Assegnista di Ricerca - Dipartimento di Informatica, Sistemi e Produzione, Università di Roma Torvergata

(January 1998 - December 1999)

Post-Doc - Dipartimento di Informatica, Sistemi e Produzione, Università di Roma Torvergata

(July 1997 - December 1997)

Post-Doc Fellow - European Space Agency (ESRIN, Frascati, Italy)

(November 1991 - October 1995)

PhD student - Università di Roma Torvergata

Short term (less than 6 months)

Visiting Professor - Lane Computer Science and Electrical Engineering Department, College of Engineering and Mineral Resources, West Virginia University, Morgantown, WV (USA): April - July 2012 ; April - June 2005 ; November - December 2002.

Visiting research associate - Concurrent Engineering Research Center, West Virginia University, Morgantown, WV (USA): 19/2/1994 – 19/9/1994.

EDITORIAL BOARD PARTICIPATION

- Empirical Software Engineering journal (Springer): 01/09/2013 – 30/06/2021
- ACM Transactions on Software Engineering and Methodology: 01/01/2014 - 31/12/2020

INVITED TALKS

- "Software Performance Antipatterns: Modeling and Analysis", 12th International School on Formal Methods for the Design of Computer, Communication and Software Systems: Model-Driven Engineering, 18-23 June 2012, Bertinoro (Italy)
- "Optimization models for non-functional requirements validation", The 25th CREST Open Workshop: Requirements and Test Optimisation, UCL, London (UK), February 2013
- "Tradeoff analysis of software quality attributes through optimization models", 10th International Workshop on Formal Engineering approaches to Software Components and Architectures , FESCA@ETAPS, Rome (Italy), March 2013
- "Performance Antipatterns: state-of-art and future perspectives", 10th European Workshop on Performance Engineering, EPEW, Venice (Italy), September 2013
- "Performance-Driven Software Model Refactoring", 1st International Workshop on Software Refactoring, IWoR@ASE 2016, Singapore, September 2016
- "Performance-Driven Software Model Refactoring", 1st International Workshop on Testing Extra-Functional Properties and Quality Characteristics of Software Systems (ITEQS@ICST), Tokyo (Japan), May 2017

AWARDS

- Best Paper Award at
1st Conference on Simulation Modeling and Applications (CSMA 1998)
Title : "An Analysis of the Efficiency of Optimistically Synchronized Parallel Simulators"
Authors : Vittorio Cortellessa, Francesco Quaglia
- ACM Best Paper Award at
14th IEEE/ACM Workshop on Parallel and Distributed Simulation (PADS 2000)
Title : "Grain sensitive event scheduling in time warp parallel discrete event simulation"
Authors : Francesco Quaglia, Vittorio Cortellessa
- EASST Best Paper Award at
13th European Joint Conferences on Theory and Practice of Software (ETAPS 2010)
Title : "Performance Modeling and Analysis of Context-Aware Mobile Software Systems"
Authors : Luca Berardinelli, Vittorio Cortellessa, Antinisca Di Marco
- ACM Best Poster Award at
8th Component-Based Software Engineering and Software Architecture Conference (COMPARCH 2014)
Title : "Performance-based Selection of Software and Hardware Features under Parameter Uncertainty"
Authors : Leire Exteberria, Catia Trubiani, Vittorio Cortellessa, Goiuria Sagardui

- IEEE/ACM Distinguished Reviewer Award at
31st IEEE/ACM International Conference on Automated Software Engineering (ASE 2016)
- 10-Years Most Influential Paper Award at
ACM/IEEE International Conference on Software Architecture (ICSA 2017)
Title : "A Modeling Approach to Analyze the Impact of Error Propagation on Reliability of
Component-Based Systems"
Authors : Vittorio Cortellessa, Vincenzo Grassi

RESPONSIBILITY OF RESEARCH PROJECTS

Principal Investigator

- "Bayesian framework for reliability prediction of component based software", funded by
NASA IV&V Facility (Fairmont, WV, USA): 01/04/2000 - 01/03/2001
- "Verification and validation of UML dynamic specifications", funded by NASA IV&V
Facility (Fairmont, WV, USA): 01/10/2000 - 30/09/2001
- "Global Software Project (GSP V3.0)", funded by Siemens Corporate Research
(Princeton, USA): 01/10/2007 - 30/09/2008
- "Dynamic Positioning System Architecture", funded by Chemtech Servicos de Engenharia
e Software Ltda. (Rio de Janeiro, Brazil): 01/10/2009 - 30/09/2010
- "Consistent evolution of software artifacts and non-functional models", funded by
European Office for Aerospace Research and Development (EOARD - Air Force), Award
for Grant/Cooperative Agreement no.FA-8655-11-1-3055: 01/10/2011 - 30/09/2014

Research Unit Responsible

- "Progettazione e validazione delle prestazioni in sistemi mobili", funded by MIUR,
Progetto Giovani Ricercatori: 01/01/1999- 31/12/1999
- "Performability-Aware Computing: Logics, Models, and Languages (PaCO)", PRIN funded
by MIUR , D.M. 1175 del 18/09/2007 (PRIN 2007): 22/09/2008 - 21/09/2010
- "MegaModelling at Runtime - scalable model-based framework for continuous
development and runtime validation of complex systems (MegaM@Rt2)",
Programme/Call: H2020-ECSEL-2016-1-RIA-two-stage, Proposal: 737494-2 - MegaMaRt2:
01/04/2017 – today
- Responsible for the Dipartimento di Informatica dell'Università dell'Aquila, as
subcontractor of Thales Italia (Chieti), in the context of the European Defense Agency
(EDA)-funded project entitled: "TACTICal Service oriented architecture" (2012-2016)
- Principal co-Investigator of the ERMES project (Envisioning Railways systems through
Model-driven Engineering approachES), fully funded by Rete Ferroviaria Italiana (2018-
2024)

SUPERVISION/EVALUATION OF PHD STUDENTS AND CANDIDATES

Advisor of PhD Students

- Pasqualina Potena (Università "G. D'Annunzio" di Chieti-Pescara, 2004-2008) – PhD Dissertation: "Decision Supporting Models for Component-Based and Service-Oriented Software Development"
- Carlo Rosa (Università dell'Aquila, 2005-2010) - PhD Dissertation: "Cross-layer Protocols in MANETs"
- Luca Berardinelli (Università dell'Aquila, 2007-2011) – PhD Dissertation: "Non-Functional Modeling and Analysis of Context-Aware Software Systems"
- Catia Trubiani (Università dell'Aquila, 2007-2011) – PhD Dissertation: "Automated generation of architectural feedback from software performance analysis results"
- Davide Arcelli (Università dell'Aquila, 2011-2015) – PhD Dissertation: "Model-based Software Refactoring Driven by Performance Analysis"
- Daniele Di Pompeo (Università dell'Aquila, 2015-2019) - PhD Dissertation: "Automated Software Refactoring driven by non-functional properties"
- Luca Traini (Università dell'Aquila, 2017-2021) - PhD Dissertation: "Performance Engineering in Agile/DevOps Development Processes"
- Michele Tucci (Università dell'Aquila, 2017-2021) - PhD Dissertation: "Advanced model-driven techniques to improve non-functional properties of software systems"
- Tiziano Lombardi (Università dell'Aquila, 2018-2022) - PhD Dissertation: "Railways modeling ecosystem for holistic design of computer-based interlocking systems"
- Federico Di Menna (Università dell'Aquila, 2022 - ongoing)
- Muhammad Imran (Università dell'Aquila, 2022 - ongoing)

International PhD Committee Member : 13 PhD candidates in 8 different countries

Member of Italian PhD Boards (Collegio di Dottorato)

- Informatica ed Applicazioni (Università dell'Aquila) - from XIX to XXVII ciclo (2003–2012)
- Ingegneria e Scienze dell'Informazione (Università dell'Aquila) - from XXVIII ciclo to today (2012-today)

SCIENTIFIC COMMITTEE ROLES AT UNIVERSITY OF L'AQUILA

- Member of the Scientific Committee of the DEWS Excellence Center (2005-2011)
- Member of the Coordination Council of the DEWS Excellence Center (2011-today)
- Member of the Scientific Committee of the EX-EMERGE Excellence Center (2019-today)
- Chair of PhD Board (Coordinatore del Dottorato) in Ingegneria e Scienze dell'Informazione (Università dell'Aquila) - (2017-today)

TEACHING

Regular courses at Università dell'Aquila

- Operating Systems (undergrads, 6 credits) : since 2001-2002 up today
- Advanced Software Engineering (grad. stud., 6 credits) : since 2004 -2005 up today
- Advanced Models for Software Engineering (grad. stud., 3 credits) : since 2016-2017 up today
- Software Engineering Project (grad. stud., 3 credits) : 2010-2011
- Foundations of Computer Science (undergrads at Economics, 3 credits) : 2003-2004

- Software Engineering I (undergrads, 6 credits) : 2001-2002

Thesis Supervisor

- About 60 Bachelor Degree and 35 Master Degree theses supervised (in Computer Science, Computer Engineering, Mathematics) at Università dell'Aquila (2002-today)
- 3 Master theses (in Computer Science) co-supervised at West Virginia University (2000-2001)

Adjunct Lecturer @ West Virginia University (USA)

- Formal Methods in Software Engineering (CS376) : Fall Semester 2000

USEFUL LINKS

WEB SITE: <https://www.disim.univaq.it/VittorioCortellessa>

SCOPUS PROFILE : <https://www.scopus.com/authid/detail.uri?authorId=6603764364>

GOOGLE SCHOLAR PROFILE: <http://scholar.google.com/citations?user=s4JPUOEAAAAJ>

PUBLICATION LIST (DBLP) : <http://dblp.uni-trier.de/pers/hd/c/Cortellessa:Vittorio>