ALESSIO FERRARI - CURRICULUM VITAE

PERSONAL INFORMATION

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E-mail	**alessio.ferrari@isti.cnr.it**
Nationality	Italian
Date of Birth	18 JANUARY 1982

SUMMARY AND HIGHLIGHTS

• H-Index Google Scholar	**H-Index: 18**; Citations: 1013; https://scholar.google.it/citations?user=-BICPzcAAAAJ&hl=it
• H-Index Scopus	**H-Index: 14**; Citations: 631; https://www.scopus.com/authid/detail.uri?authorId=55765001561
• Short Biography	I have been a research scientist at ISTI-CNR, Pisa, Italy, since 2013 (permanent position from 2018). Previously, I had been a post-doc research fellow at the same institution from 2011 to 2013. From 2007 to 2011, I performed my Ph. D. in Computer Engineering at the University of Florence, Florence, Italy. During the Ph. D., I was also hired as system engineer at General Electric Transportation Systems (GETS) s.p.a., a world leading railway signalling company.
• Research Interests	I am a researcher in **empirical software engineering**, with a particular focus on **requirements engineering**, **model-based development** and **code generation**. In particular, my main research interests are: (a) application of **natural language processing** technologies to requirements engineering, with a focus on detection of ambiguity and communication defects in requirements documents and requirements elicitation interviews; (b) software process improvement for safety-critical systems, with a focus on formal/semi-formal model-based development and code generation in the railway domain. I am also interested in teaching and **role-playing** activities with students.

RESEARCH AND WORK EXPERIENCE

• Dates (from – to)	**SEPTEMBER 2011-TODAY**
• Name and address of employer	National Research Council of Italy, Institute of Information Science and Technologies "A. Faedo" (ISTI-CNR, http://www.isti.cnr.it), Via G. Moruzzi 1, 56124, Pisa, Italy. Contact: Prof. Stefania Gnesi, stefania.gnesi@isti.cnr.it
• Occupation or position held	Research Scientist – Permanent (December 2018 - Today) Research Scientist – Fixed Term (February 2013 – December 2018); Post-doctoral Research Fellow (September 2011 - February 2013);
• Main activities and responsibilities	Research on applications of **natural language processing** methods and tools for the analysis of system requirements expressed in natural language. Research on ambiguity and **communication defects** in requirements engineering.
• Dates (from – to)	**SEPTEMBER 2010- SEPTEMBER 2011**
• Name and address of employer	University of Florence, Department of Information Engineering (DINFO, http://www.dinfo.unifi.it/changelang-eng.html), Via Santa Marta, 3, 50139, Florence, Italy. Contact: Prof. Alessandro Fantechi, alessandro.fantechi@unifi.it
• Occupation or position held	Research Fellow
• Main activities and responsibilities	Research on **code generation** for safety-critical railway signalling systems.
• Dates (from – to)	**SEPTEMBER 2007- SEPTEMBER 2010**
• Name and address of employer	General Electric Transportation Systems (GETS) s.p.a. – Research and Development (Today: Alstom Ferroviaria s.p.a.), Via Pietro Fanfani 21, Florence, Italy. Contact: Stefano Bacherini, stefano.bacherini@transport.alstom.com.
• Occupation or position held	System Engineer (Permanent Position) – In parallel with Ph. D. studies
• Main activities and responsibilities	Research and development of formal/semi-formal **model-based processes** for safety-critical railway signalling systems, with a focus on code generation. **Coordination** of the research activities of two PhD students at the University of Florence, Daniele Grasso and Gianluca Magnani on the theme of modeling and formal verification of railway signaling systems (Role attested by protocol of the University of Florence, Department of Information Engineering 105650 - 21/07/2016 Pos III / 13).
• Dates (from – to)	**SEPTEMBER 2006-JUNE 2007**
• Name and address of employer	Helsinki University of Technology (HUT), Telecommunication and Multimedia Laboratory (TML), 02150, Espoo, Helsinki, Finland (Today: Aalto University). Contact: Prof. Petri Vuorimaa, petri.vuorimaa@aalto.fi
• Occupation or position held	Research Assistant
• Main activities and responsibilities	Research and development on **operating systems** for mobile phones.

EDUCATION AND TRAINING

• Dates (from – to)	**JANUARY 2008-APRIL 2011**
• Name and type of organisation providing education and training	University of Florence, Faculty of Computer Engineering

• Title of qualification awarded	Ph. D. in Computer Engineering. Thesis: “Adoption of Code Generation by a Railway Signalling Manufacturer”, Tutor: Prof. Alessandro Fantechi (Thesis’ link: http://www.dsi.unifi.it/~diimt/ferrari.pdf) Industrial Ph. D. in collaboration with General Electric Transportation Systems s.p.a. (Today: Alstom).
• Dates (from – to)	**NOVEMBER 2004-SEPTEMBER 2007**
• Name and type of organisation providing education and training	University of Florence, Faculty of Computer Engineering
• Title of qualification awarded	MSc in Computer Engineering **(110/110 cum laude)** Thesis: “Kernel Prototype for Code Optimization Environment”. Thesis performed at Helsinki University of Technology (HUT) (Today: Aalto University), Tutor: Petri Vuorimaa, Alessandro Fantechi.
• Dates (from – to)	**SEPTEMBER 2001-NOVEMBER 2004**
• Name and type of organisation providing education and training	University of Florence, Faculty of Computer Engineering
• Title of qualification awarded	BSc in Computer Engineering **(110/110 cum laude)** Thesis: “Petri Nets modules integration in the context of the ORIS project”, Tutor: Prof. Enrico Vicario.
• Dates (from – to)	**31 JULY - 12 AUGUST 2012** (72 HOURS)
• Name and type of organisation providing education and training	NATO Science for Peace and Security Programme, Marktoberdorf Summer School on Software Engineering, https://asimod.in.tum.de/2012/ , – Marktoberdorf, Germany.
• Dates (from – to)	**3 SEPTEMBER 2008 – 12 SEPTEMBER 2008** (72 HOURS)
• Name and type of organisation providing education and training	GII Doctoral School in Computer Engineering 2008 - Boosting Services and Information in Adaptive Networked Enterprises, http://gii2008.ws.dei.polimi.it – L'Aquila, Italy.
• Dates (from – to)	**SEPTEMBER 2005 – FEBRUARY 2006** (6 MONTHS)
• Name and type of organisation providing education and training	University of Twente, the Netherlands – Computer Science University (Erasmus Student)

RESEARCH AWARDS

• Date	AUGUST 2018
• Award	**Best Paper Award**, 26th IEEE International Requirements Engineering Conference 2018 (Core A, main Requirements Engineering conference), with the paper Learning from Mistakes: an Empirical Study of Elicitation Interviews performed by Novices (Bano, M.; Zowghi D.; Ferrari, A.; Spoletini P.; Donati, B.).
• Institution	IEEE CS

• Date	AUGUST 2015
• Award	**Best Paper Award**, 23rd IEEE International Requirements Engineering Conference 2015 (Core A, main Requirements Engineering conference), with the paper *Ambiguity as a resource to disclose tacit knowledge* (Ferrari, A.; Spoletini, P.; Gnesi, S.). See: http://goo.gl/P9s800
• Institution	IEEE CS

• Date	SEPTEMBER 2010
• Award	**Best Paper Award**, 15th International Workshop on Formal Methods for Industry Critical Systems 2010 (Core C), with the paper *The Metro Rio ATP Case Study* (Ferrari, A.; Fantechi. A.; Grasso, D.; Magnani, G.). See: http://easst.aulp.co.uk/awards-to-date
• Institution	European Association of Software Science and Technology (EASST)

• Date	MARCH 2016
• Award	**ISTI Young++ Researcher Award,** (Reference not available), prize given to the best researchers of the institution with less than 36 years.
• Institution	ISTI-CNR

• Date	MARCH 2013
• Award	**ISTI Young Researcher Award**, See: http://www.isti.cnr.it/news/yawards-gym.php, prize given to the best researchers of the institution with less than 32 years.
• Institution	ISTI-CNR

• Date	Years 2014, 2015, 2016
• Award	**ISTI Grant for Young Mobility**, See: http://www.isti.cnr.it/news/yawards-gym.php - 3K Euro grant awarded for a period abroad at the University of Technology Sydney, Australia; - 3K Euro grant awarded for a period abroad at Lero, University of Limerick, Ireland; - 3K Euro grant awarded for a period abroad at Georgia Tech, Atlanta, Georgia.
• Institution	ISTI-CNR

PERSONAL SKILLS AND COMPETENCES

MOTHER TONGUE	**ITALIAN**
OTHER LANGUAGES	
	ENGLISH (EXCELLENT), GERMAN (BASIC)

RESEARCH COMPETENCES

Natural Language Processing applied to Requirements Engineering and Defect Detection

Excellent knowledge of **natural language processing (NLP) techniques** applied to system and software **requirements analysis**. This is the main topic of my research work at ISTI-CNR since September 2011. The experience on the topic has been developed in the framework of the PAR-FAS Regional Project 2007-2013 TRACE-IT (Train Control Enhancement via Information Technology), focused on development of safety-critical railway systems, and in the context of the European FP7-ICT-2013.8.2 LearnPAd project, focused on the development of an e-learning system for public administrations.

My work focuses on **ambiguity detection**, and other linguistic quality defects, in system and software requirements specification expressed in natural language (e.g., English), and in requirements elicitation interviews. During the research on requirements analysis I published about **25 articles in international conferences and journals**. The most relevant is "Alessio Ferrari, Paola Spoletini, Stefania Gnesi: *Ambiguity as a resource to disclose tacit knowledge*. RE 2015: 26-35 ". The article won the **Best Paper Award** at the IEEE Requirements Engineering Conference 2015, the world's leading conference on requirements engineering.

During my research, I gained confidence on **natural language processing (NLP) approaches and machine learning** algorithms. Based on these approaches, I have developed software solutions for automatic text analysis, and in particular for identifying ambiguities, clarity defects, structural defects, and completeness defects within specific documents. In particular, I developed PAD (Pragmatic Ambiguity Detector - https://goo.gl/1Aqmuh), CAR (Completeness Assistant for Requirements - https://goo.gl/41pmv1), and QuOD (Quality Checker For Official Documents - http://narwhal.it/quod/index.html). In the context of the European FP7-ICT-2013.8.2 LearnPAd project I have also extended the techniques developed in the requirements domain to be applied to official public administration documents.

Model-based Development and Code Generation

Excellent knowledge of **model-based, formal and semi-formal processes for embedded safety-critical systems**. In particular, I have proven theoretical and practical knowledge of Matlab / Simulink / Stateflow tools for modeling safety-critical railway systems, model verification and **code generation**. The latter was my job and research topic between 2007 and 2011. I spent this time between the University of Florence – Faculty of Computer Engineering and General Electric Transportation Systems, where I was employed as a System Engineer, with the responsibility to coordinate the research on the application of formal / semi-formal methods on railway signaling systems (Protocol of the University of Florence, Department of Information Engineering 105650 - 21/07/2016 Pos III / 13).

The research results were published in about **10 international conferences and journals**.The most important work is "Alessio Ferrari, Alessandro Fantechi, Stefania Gnesi, Gianluca Magnani: *Model-Based Development and Formal Methods in the Railway Industry*. IEEE Software 30 (3): 28-34 (2013)".
The research results were used to restructure the software development process of the General Electric Transportation Systems company. The new process has been implemented within the following industrial projects:

• **SSC Metro Rio:** The Automatic Train Protection (ATP) system for the Subway in Rio de Janeiro, for which I developed the entire Simulink model used for code generation (the article "The Metro Rio ATP Case Study", regarding this project, received the **Best Paper Award** at the FMICS 2010 conference);
• **FDT Beijing:** Fail-safe data transmission system, for which I developed the requirements and the architecture with UML / SysML support;
• **SSC / SCMT BL3:** ATP system for Italian secondary lines, for which I developed part of the Simulink models used to generate the code.

Communications-based Train Control Systems

Excellent expertise in the analysis and development of **Communications-based Train Control (CBTC)** systems, modern systems for controlling and supervising train travel in metropolitan areas. This knowledge was developed within ISTI-CNR between **September 2011 and November 2014** within the PAR-FAS Regional Project 2007-2013 TRACE-IT (Train Control Enhancement via Information Technology). My job was to work as a railway **domain expert** for the analysis and development of an automated system for routing and train monitoring (Automatic Train Supervision system). The research results were published in about **10 international conferences and journals**. The most important work is "Alessio Ferrari, Giorgio Oronzo, Giacomo Martelli, Simone Menabeni: *From commercial documents to system requirements: an approach for the engineering of new CBTC solutions*. STTT 16 (6): 647-667 (2014) ".

Additional Technical Competences

• Excellent knowledge of the **Python** programming language, acquired during my research at ISTI-CNR, in the context of activities related to the analysis of system requirements expressed in natural language.

• Excellent knowledge of the **C** programming language, acquired during my work at General Electrict Transportation Systems, in which I developed several railway safety critical systems for the company (see above).

• Good knowledge of the **C ++ programming** language and **GCC compilation framework**, matured during the master thesis period. The thesis project was developed at the University of Helsinki (Finland), and consisted in the design and development of a prototype operating system kernel for mobile systems. The thesis was part of a joint project between four Finnish universities and companies such as Nokia, Eletrobit and Antro.

• Good knowledge of the **Java** programming language and **Eclipse** platform, acquired thanks to numerous university projects and especially during the BSc thesis project in computer engineering. The thesis consisted in the development of an integration framework for modeling, analysing and verifying discrete event systems.

• Practical Confidence with **Design and Architectural Patterns** for Software Engineering Technologies acquired during the Bachelor's thesis in Computer Engineering and during the courses of Design of Software Architecture and Advanced Design of Software Architecture completed at the University of Twente (The Netherlands) during the Erasmus period (September 2005 - February 2006).

RESEARCH PROJECTS

I am actively involved in several European Horizon 2020 project proposal definition, especially under the Shift2Rail program (https://shift2rail.org), which focuses on the railway domain.

I have technology transfer collaboration with large companies, such as Alstom Transport (http://www.services.transport.alstom.com/s/, contact: Stefano Bacherini, stefano.bacherini@transport.alstom.com), and small start-ups, such as Narwhal (http://narwhal.it, contact: Guido Parente, info@narwhal.it).
With Alstom, we have also recently published a paper on defect detection through NLP. With Narwhal, we have developed an online tool for defect detection in official documents (http://narwhal.it/quod/index.html).

The funded Regional and EU projects to which I participated are:

H2020 2017-2019 S2R- OC-IP2-01-2017 ASTRAIL
EUROPEAN PROJECT H2020

Coordinator: Riccardo Scopigno (Istituto Superiore Mario Boella, Torino, Italy)
Period: 1/09/2017 – 1/09/2019
Link: http://www.astrail.eu

Role: Work Package leader for the activities related to the selection of the most suitable formal and semi-formal methods to be applied for the development of railway systems (WP4); **definition of the proposal**.

FP7-ICT-2013.8.2 Model-Based Social Learning for Public Administrations (LEARNPAD)
EUROPEAN PROJECT FP7

Coordinator: Antonia Bertolino
Period of activity: da 03/11/2014 – 31/08/2017
Link: http://www.learnpad.eu/index.php

Role: coordinator of the activities concerning the analysis of public administration procedures written in natural language, in the context of the European project LearnPAd (Coordination role attested by ISTI-CNR Protocol 0002875 - 20/07/2016); **definition of the proposal**; definition of requirements for the project.

PAR FAS 2007-2013 Train Control Enhancement via Information Technology (TRACE-IT)
REGIONAL PROJECT PAR-FAS

Coordinator: ECM s.p.a.
Period: 1/09/2011 – 02/11/2014
Link: http://traceit.isti.cnr.it

Role: railway **domain expert and coordinator** of the activities related to the development of the Automatic Train Supervision system (ATS) in the context of the regional project TRACE-IT (Coordination attested by ISTI-CNR Protocol 0002877 - 20/07/2016).

ORGANISATIONAL SKILLS AND COMPETENCES

Excellent organizational skills exercised during the PhD, and during my work as Research Scientist at ISTI-CNR. In particular, during the ISTI-CNR period, I have been the **coordinator** of activities for analysing public administration procedures in the context of the European LearnPAd project (Role of coordination attested by ISTI-CNR Protocol 0002875 - 20/07/2016).

In addition, I worked as a **domain expert and coordinator** during the TRACE-IT project (Train Control Enhancement via Information Technology, role attested by ISTI-CNR Protocol 0002877 - 20/07/2016), given my experience in the railway sector.

Finally, during the PhD, I coordinated the research activities of two **Ph. D. candidates** at the University of Florence, Gianluca Magnani and Daniele Grasso, who were doing their Ph.D. in General Electric Transportation Systems where I was employed as a System Engineer. I am also currently following a Ph. D. candidate at the University of Florence**,** Gloria Gori (co-tutor with Prof. A Fantechi).

I have also been a **tutor of 11 dissertations** at the University of Florence, Faculty of Computer Engineering, and at the University of Pisa, Faculty of Computer Science. The works are listed below:

Master's Theses:

• Benedetta Rosadini: Automatic defect detection in natural language requirements. University of Florence, Faculty of Computer Engineering, (2016).
• Fabio Meacci: Formal verification of railway interlocking systems: analysis and evaluation of the SPIN model checker. University of Florence, Faculty of Computer Engineering, (2010).
• Silvia Lorenzini: Graphical Interface for the NuSMV Model Checker. University of Florence, Faculty of Computer Engineering, (2010).
• Andrea-Santosh Boninsegni: Analysis and evaluation of SCADE modelling tool in the railway signalling context. University of Florence, Faculty of Computer Engineering, (2009).
• Daniele Grasso: Abstract interpretation as a code verification technique: tools and applications. University of Florence, Faculty of Computer Engineering, (2009).
• Gianluca Magnani: Static analysis tools for Stateflow models. University of Florence, Faculty of Computer Engineering, (2009).

Bachelor's Theses:

• Manuel Musetti: Development of a GUI for tool for requirement analysis and generation of product families. University of Pisa, Faculty of Computer Science, (2014).
• Giuseppe Lipari: Identification of pragmatic ambiguities in requirements documents written in natural language. University of Pisa, Faculty of Computer Science, (2014).
• Daniele Cicciarella: Development of a tool for analysing requirements and generating product families. University of Pisa, Faculty of Computer Science, (2013).
• Gabriele Dionisi: Analysis and modeling of an automatic train operation system. University of Florence, Faculty of Computer Engineering, (2010).
• Alessio Palmieri: Interactive viewer for NuSMV counter-examples. University of Florence, Faculty of Computer Engineering, (2010).

ITALIAN AND INTERNATIONAL COLLABORATIONS

My research on natural language processing applied to system and software requirements conducted at ISTI-CNR led me to collaborate with numerous laboratories in Italy and Europe. Among these, it is worth mentioning:

- **University of Technology Sydney**, Sydney, Australia; Collaborator: Prof. Didar Zowghi (https://www.uts.edu.au/staff/didar.zowghi); Joint works: "Muneera Bano, Alessio Ferrari, Didar Zowghi, Vincenzo Gervasi, Stefania Gnesi: *Automated Service Selection Using Natural Language Processing,* Requirements Engineering in the Big Data Era, CCIS, vol. 558, pp 3-17, 2015";

- **Kennesaw State University**, Atlanta, GA, USA; Collaborator: Prof. Paola Spoletini (http://ksuweb.kennesaw.edu/~pspoleti/); Joint works: "Alessio Ferrari, Paola Spoletini, Stefania Gnesi: *Ambiguity as a resource to disclose tacit knowledge*, IEEE RE 2015: 26-35", and others (see publications);

- **University of Limerick** – LERO, Limerick, Ireland; Collaborator: Prof. Bashar Nuseibeh (http://www.lero.ie/people/basharnuseibeh); Joint works: "Yehia Elrakaiby, Alessio Ferrari, Paola Spoletini, Stefania Gnesi, Bashar Nuseibeh: *Using Argumentation to Explain Ambiguity in Requirements Elicitation Interviews.* IEEE RE 2017: 51-60";

- **Computational Linguistics Institute (ILC)** CNR, Pisa, Italy; Collaborator: Dr. Felice dell'Orletta (http://www.Italianlp.it/people/felice-dellorletta/); Joint works: "Alessio Ferrari, Felice Dell'Orletta, Giorgio Oronzo Spagnolo, Stefania Gnesi: *Measuring and Improving the Completeness of Natural Language Requirements*. REFSQ 2014, LNCS, 8396: 23-38", and others (see publications);

- **High Performance Computing (HPC) Laboratory** at ISTI-CNR, Pisa, Italy; Collaborator: Dr. Gabriele Tolomei (https://gabrieletolomei.wordpress.com); Joint works: "Alessio Ferrari, Stefania Gnesi, Gabriele Tolomei: *Using Clustering to Improve the Structure of Natural Language Requirements Documents*. REFSQ 2013, LNCS, 7830: 34-49" and others (see publications);

- **University of Zurich** (Requirements Engineering Research Group), Zurich, Switzerland; Collaborator: Dr. Norbert Seyff (https://www.ifi.uzh.ch/en/rerg/people/seyff.html); Joint works: "Elia Bruni, Alessio Ferrari, Norbert Seyff, Gabriele Tolomei: *Automatic Analysis of Multimodal Requirements: A Research Preview*. REFSQ 2012, LNCS, 7195: 218-224";

- **CIMeC – Center for Mind/Brain Sciences** (Language, Interaction and Computation (CLIC) Laboratory), Trento, Italy; Collaborator: Dr. Elia Bruni (http://clic.cimec.unitn.it/~elia.bruni/); Joint works: "Elia Bruni, Alessio Ferrari, Norbert Seyff, Gabriele Tolomei: *Automatic Analysis of Multimodal Requirements: A Research Preview*. REFSQ 2012, LNCS, 7195: 218-224".

I also spent the following **research periods abroad**:

- **March 18 – April 5, 2016:** Visiting Researcher at University of Technology Sydney, Sydney, Australia (Contact: Prof. Didar Zowghi, didar.zowghi@uts.edu.au).

- **June 28 - July 6, 2016:** Visiting Researcher at the University of Limerick - LERO, Limerick, Ireland (Contact: Prof. Bashar Nuseibeh, bashar.nuseibeh@lero.ie).

- **January 19 - February 4, 2014:** Visiting Researcher at the College of Computing School of Computer Science Georgia Institute of Technology, Atlanta, Georgia, USA (http://www.cc.gatech.edu, Contact: Prof. Alessandro Orso, bear@cc.gatech.edu) and at College of Computing and Software Engineering and Game Development, Kennesaw State University, Marietta Campus, Georgia, USA (http://ccse.kennesaw.edu), Contact: Prof. Paola Spoletini, psppoleti@kennesaw.edu).

- **September 2006 - June 2007:** Research Assistant at the Helsinki University of Technology (HUT), Telecommunication and Multimedia Laboratory (TML) (Today: Aalto University, http://www.aalto.fi/en/), Contact: Prof. Petri Vuorimaa, Petri.vuorimaa@aalto.fi.

TEACHING

I enjoy teaching and interacting with students, and I like to engage them in role-playing activities to let them experience the different phases of the software development process. I have also published a work on role-playing with students (Beatrice Donati, Alessio Ferrari, Paola Spoletini, Stefania Gnesi: *Common Mistakes of Student Analysts in Requirements Elicitation Interviews*. REFSQ 2017: 148-164).

My current institution is focused on research, but I had the possibility to perform role-playing activities with students in other universities, namely the University of Florence (ITA), Kennesaw State University (USA), and University of Technology Sydney (AU).

Formal courses for which I was appointed as instructor are reported below:

University: University of Florence, Faculty of Computer Engineering, Florence, Italy
Course Type: **BSc Course**
Course Topic: Foundations of Computer Science – C Programming Laboratory
Years: **2008, 2009, 2010**
Contact: Prof. Alessandro Fantechi, alessandro.fantechi@unifi.it

University: University of Florence, Faculty of Computer Engineering, Florence, Italy
Course Type: **MSc Seminar**
Course Topic: Requirements Engineering, NLP and Role Playing
Years: **2013, 2014, 2015**
Contact: Prof. Alessandro Fantechi, alessandro.fantechi@unifi.it

University: University of Florence, Faculty of Computer Engineering, Florence, Italy
Course Type: **Ph. D. Course**
Course Topic: Requirements Engineering – Focus on Natural Language Processing
Year: **2016**
Contact: Prof. Paolo Frasconi, paolo.frasconi@unifi.it

PROGRAM COMMITTEES AND CONFERENCE ORGANISATION

Event: Working Conference on Requirements Engineering, Foundations for Software Quality (REFSQ'20)
Role: Local Organiser co-chair
Reference: https://refsq.org/2020/organization/organizing-committee

Event: ACM/IEEE International Conference on Software Engineering (ICSE'19)
Role: PC Member
Reference: https://conf.researchr.org/committee/icse-2020/icse-2020-papers-program-committee

Event: IEEE Requirements Engineering Conference (RE'17, RE'18, RE'19)
Role: PC Member
Reference: http://re19.ajou.ac.kr/pages/organization/program_committee/

Event: Working Conference on Requirements Engineering, Foundations for Software Quality (REFSQ'17, REFSQ'18, REFSQ'19)
Role: PC Member
Reference: https://refsq.org/2017/organization/programme-committee/

Event: Workshop on Natural Language Processing for Requirements Engineering (NLP4RE'18, NLP4RE'19)
Role: Organiser
Reference: http://fmt.isti.cnr.it/nlp4re/index.php?id=organisation

Event: International Workshop on Artificial Intelligence for Requirements Engineering (AIRE'17, AIRE'18, AIRE'19)
Role: PC Member
Reference: http://www4.in.tum.de/~aire/organization.html

Event: 1st International Workshop on Requirements Engineering for Investigating and Countering Crime (iRENIC'16, Beijing, China)
Role: PC Member
Reference: http://irenic.lero.ie/pc.html

Event: 18th International Software Product Line Conference (SPLC'14, Firenze, Italy)
Role: Organising Committee Member
Reference: http://www.splc2014.net/organization.html

PUBLICATIONS

(from https://dblp.uni-trier.de/pers/hd/f/Ferrari:Alessio)

2019

[j15] Alessio Ferrari, Andrea Esuli:
An NLP approach for cross-domain ambiguity detection in requirements engineering. Autom. Softw. Eng. 26(3): 559-598 (2019)

[j14] Muneera Bano, Didar Zowghi, Alessio Ferrari, Paola Spoletini, Beatrice Donati:
Teaching requirements elicitation interviews: an empirical study of learning from mistakes. Requir. Eng. 24(3): 259-289 (2019)

[j13] Alexander Dekhtyar, Jane Huffman Hayes, Irit Hadar, Erin Combs, Alessio Ferrari, Sarah Gregory, Jennifer Horkoff, Meira Levy, Maleknaz Nayebi, Barbara Paech, Jared Payne, Matt Primrose, Paola Spoletini, Shell Clarke, Chuck Brophy, Daniel Amyot, Walid Maalej, Guenther Ruhe, Jane Cleland-Huang, Didar Zowghi:
Requirements Engineering (RE) for Social Good: RE Cares [Requirements]. IEEE Software 36(1): 86-94 (2019)

[c57] Vincenzo Gervasi, Alessio Ferrari, Didar Zowghi, Paola Spoletini:
Ambiguity in Requirements Engineering: Towards a Unifying Framework. From Software Engineering to Formal Methods and Tools, and Back 2019: 191-210

[c56] Alessio Ferrari, Giorgio Oronzo Spagnolo, Antonella Fiscella, Guido Parente:
QuOD: An NLP Tool to Improve the Quality of Business Process Descriptions. From Software Engineering to Formal Methods and Tools, and Back 2019: 267-281

[c55] Maurice H. ter Beek, Arne Borälv, Alessandro Fantechi, Alessio Ferrari, Stefania Gnesi, Christer Löfving, Franco Mazzanti:
Adopting Formal Methods in an Industrial Setting: The Railways Case. FM 2019: 762-772

[c54] Davide Basile, Maurice H. ter Beek, Alessio Ferrari, Axel Legay:
Modelling and Analysing ERTMS L3 Moving Block Railway Signalling with Simulink and Uppaal SMC. FMICS 2019: 1-21

[c53] Alessio Ferrari, Paola Spoletini, Muneera Bano, Didar Zowghi:
Learning Requirements Elicitation Interviews with Role-Playing, Self-Assessment and Peer-Review. RE 2019: 28-39

[c52] Fabiano Dalpiaz, Alessio Ferrari, Xavier Franch, Sarah Gregory, Frank Houdek, Cristina Palomares:
Requirements Philology (keynote). REFSQ Workshops 2019

[c51] Alessio Ferrari, Maurice H. ter Beek, Franco Mazzanti, Davide Basile, Alessandro Fantechi, Stefania Gnesi, Andrea Piattino, Daniele Trentini:
Survey on Formal Methods and Tools in Railways: The ASTRail Approach. RSSRail 2019: 226-241

[e2] Paola Spoletini, Patrick Mäder, Daniel M. Berry, Fabiano Dalpiaz, Maya Daneva, Alessio Ferrari, Xavier Franch, Sarah Gregory, Eduard C. Groen, Andrea Herrmann, Anne Hess, Frank Houdek, Oliver Karras, Anne Koziolek, Kim Lauenroth, Cristina Palomares, Mehrdad Sabetzadeh, Norbert Seyff, Marcus Trapp, Andreas Vogelsang, Thorsten Weyer:
Joint Proceedings of REFSQ-2019 Workshops, Doctoral Symposium, Live Studies Track, and Poster Track co-located with the 25th International Conference on Requirements Engineering: Foundation for Software Quality (REFSQ 2019), Essen, Germany, March 18th, 2019. CEUR Workshop Proceedings 2376, CEUR-WS.org 2019 [contents]

2018

[j12] Alessio Ferrari, Hans Friedrich Witschel, Giorgio Oronzo Spagnolo, Stefania Gnesi:
Improving the quality of business process descriptions of public administrations: Resources and research challenges. Business Proc. Manag. Journal 24(1): 49-66 (2018)

[j11] Flavio Corradini, Alessio Ferrari, Fabrizio Fornari, Stefania Gnesi, Andrea Polini, Barbara Re, Giorgio Oronzo Spagnolo:
A Guidelines framework for understandable BPMN models. Data Knowl. Eng. 113: 129-154 (2018)

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