

## Personal Information



Daniele Di Pompeo  
[daniele.dipompeo@univaq.it](mailto:daniele.dipompeo@univaq.it)

## Education

Ph.D in ICT.

Thesis title “Automated tool-supported Software Refactoring driven by Performance”

Thesis Advisor: Prof. Vittorio Cortellessa.

Master’s Degree in Computer and Systems Engineering 110/110 cum laude

Thesis title: “A Unifying Framework for Performance-Driven Software Model Refactoring”

Thesis Advisor: Prof. Vittorio Cortellessa

Bachelor’s Degree in Computer and Systems Engineering (102/110).

Thesis title: “Realizzazione mediante beContent di ResearchWare, un’applicazione web a supporto di un dipartimento universitario”

Thesis Advisor: Prof. Serafino Cicerone

## Teaching Activities

### Academic Year 2022-2023

Metodi di sviluppo Agile 6 CFU 48 hours of teaching

Bachelor's Degree Course in Computer Science, University of L'Aquila

Software Quality Engineering (Expert of the Subject)

Master's Degree Course in Computer Science, University of L'Aquila

Advanced Verification and Validation (Expert of the Subject)

Master's Degree Course in Computer Science, University of L'Aquila

### Academic Year 2021-2022

Metodi di sviluppo Agile (Adjunct professor for 36 hours) 6 CFU 48 hours of teaching  
Bachelor's Degree Course in Computer Science, University of L'Aquila

Software Quality Engineering (Expert of the Subject)  
Master's Degree Course in Computer Science, University of L'Aquila

Advanced Verification and Validation (Expert of the Subject)  
Master's Degree Course in Computer Science, University of L'Aquila

### **Academic Year 2019-2020**

Software Quality Engineering (Expert of the Subject)  
Master's Degree Course in Computer Science, University of L'Aquila

Advanced Verification and Validation (Expert of the Subject)  
Master's Degree Course in Computer Science, University of L'Aquila

## **Seminars & Labs**

### **Academic Year 2022-2023**

Model-Driven Engineering Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

Performance Modelling Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

### **Academic Year 2021-2022**

Model-Driven Engineering Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

Performance Modelling Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

### **Academic Year 2020-2021**

Model-Driven Engineering Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

Performance Modelling Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

### **Academic Year 2019-2020**

Model-Driven Engineering Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

Performance Modelling Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

### **Academic Year 2018-2019**

Model-Driven Engineering Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

Performance Modelling Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

Seminar on From Performance models back to Software models in  
Advanced Verification and Validation a Master's Degree Course in Computer Science,  
University of L'Aquila

Graphical User Interface and JavaFX Lab in  
Object-Oriented Software Design a Bachelor's Degree Course in Computer Science, University  
of L'Aquila

Version Control System and GIT Lab in  
Object-Oriented Software Design a Bachelor's Degree Course in Computer Science, University  
of L'Aquila

Version Control System and GIT Lab in  
Software Engineering a Master's Degree Course in Computer and Systems Engineering,  
University of L'Aquila

Object-Relational Mapping and Hibernate Lab in  
Software Engineering a Master's Degree in Computer and Systems Engineering, University of  
L'Aquila

### **Academic Year 2017-2018**

Model-Driven Engineering Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

Performance Modelling Lab in  
Software Quality Engineering a Master's Degree Course in Computer Science, University of  
L'Aquila

Version Control System and GIT Lab in  
Software Engineering a Master's Degree Course in Computer and Systems Engineering,  
University of L'Aquila

Object-Relational Mapping and Hibernate Lab in  
Software Engineering a Master's Degree in Computer and Systems Engineering, University of  
L'Aquila

### **Academic Year 2016-2017**

Version Control System and GIT Lab in  
Software Engineering a Master's Degree Course in Computer and Systems Engineering,  
University of L'Aquila

Object-Relational Mapping and Hibernate Lab in  
Software Engineering a Master's Degree in Computer and Systems Engineering, University of  
L'Aquila

### **Academic Year 2015-2016**

Object-Relational Mapping and Hibernate Lab in  
Software Engineering a Master's Degree in Computer and Systems Engineering, University of  
L'Aquila

## **PhD Students Co-Supervisor**

**Payel Patra** (2023-present)

PhD student at the Department of Information Engineering, Computer Science and Mathematics  
of the Università degli studi dell'Aquila.

## **Thesis supervisor**

### **Academic Year 2021-2022**

**Co-Advisor** Bachelor's Degree Thesis in Computer Science di Alberto Isotti ancora da completare

### **Academic Year 2020-2021**

**Co-Advisor** Bachelor's Degree Thesis in Computer Science  
Student: Enrico Simone Adamelli  
Thesis title: Reporting di performance Unit Testing su applicazioni open source

**Co-Advisor** Bachelor's Degree Thesis in Computer Science  
Student: Michele Intrevado  
Thesis title: Estensione di Java unit test con misure di performance

### **Academic Year 2019-2020**

**Co-Advisor** Bachelor's Degree Thesis in Computer Science  
Student: Vincenzo De Petris  
Thesis title: Performance benchmarking di un'applicazione Java basata su microservizi

**Co-Advisor** Bachelor's Degree Thesis in Computer Science  
Student: Natan Cieplinski  
Thesis title: Analisi delle performance di applicazioni J2EE mediante SPEC benchmarks

### **Academic Year 2017-2018**

**Co-Advisor** Tesi Magistrale in Ingegneria Informatica ed Automatica di Marisa Fallone dal titolo Progettazione, implementazione e analisi delle prestazioni di un'applicazione web basata su microservizi

### **Academic Year 2016-2017**

**Co-Advisor** Bachelor's Degree Thesis in Computer Science  
Student: Stefano Di Francesco  
Thesis title: Reverse engineering di un'applicazione web in UML+MARTE e integrazione del modello con risultati di performance monitoring

## **Other activities**

### **Academic Year 2016-2017**

**Tutor** for the collaboration in the support activities for incoming students envisaged by the Erasmus Mundus Programme (150 hours)

Supervisor Prof.ssa Monica Nesi.

### **Academic Year 2015-2016**

**Tutor** for the collaboration in the support activities for incoming students envisaged by the Erasmus Mundus Programme (150 hours)  
Supervisor Prof.ssa Monica Nesi.

### **Academic Year 2012-2013**

**Scholarship holder** for research activities on the topic “Refactoring of the beContent platform” (6 months)

## **Teaching or research activity at qualified Italian or foreign institutes**

**Assistant Professor (RTD-a)** from March 2023 to date

**Postdoctoral researcher** at the ExEmerge Center of Excellence from December 2020 to February 2023 (26 months)

**Postdoctoral researcher** at the DEWS Center of Excellence from December 2018 to November 2020 (24 months)

**Visiting student** at the University College Dublin from the 15th, October 2017 to the 25th March 2018 (5 months and 3 days)  
Supervisor prof. Mel ó Cinneide

**Student** of the 16th International School on Formal Methods for the Design of Computer, Communication and Software Systems: Quantitative Evaluation of Collective Adaptive Systems, Bertinoro, 20-24 June 2016

## **Project Activities**

**SoBigData** (2023-present) is aimed at training the next generation of responsible social data scientists engaged in the challenging research questions of the Virtual Laboratories. It will also provide an accelerator of data-driven innovation that streamlines the collaboration with industries and startups to develop proof-of-concept projects.

**Daniele Di Pompeo:** lead “Activity 2.12: UNIVAQ Research contribution to Virtual Laboratories facente parte del Working Package 2 - Virtual Research Laboratories e concorrente al raggiungimento dell’Obiettivo 2.2 – Virtual Research Laboratories dissemination”

**EMERGE** (2019-2023) The EMERGE project aims to develop an on-board platform capable of supporting advanced mobility services on the vehicle and infrastructure side, for ordinary and emergency operating conditions.

**Daniele Di Pompeo** has been involved in the definition and validation of the non-functional requirements (production objective 14) of the entire EMERGE system.

**MegaM@rt2** (2018-2019) Project funded by Electronic Component Systems for European Leadership Joint Undertaking under grant agreement No 737494. The goal of the project is to create a framework that incorporates methods and tools for continuous development and validation by exploiting the benefits of scalable model-based methods to deliver significantly improved productivity, quality and predictability benefits of large and complex industrial systems.

**Daniele Di Pompeo** has been involved in the definition of a metamodel for the traceability of non-functional properties of systems (WP4), and in the implementation of tools for the refactoring guided by the non-functional properties of the systems themselves integrated in the project framework.

**SBS-Demo 2.1** (2019-2021) is a project funded by the Radiolabs consortium with the aim of "Design and Development of GNSS Environment Characterization and Track Area Classification and GNSS Performance Analysis Environment tools"

**Daniele Di Pompeo** was involved as manager and supervisor of the implementation section.

## **Organization, management and coordination of national and international research groups, or participation in them**

**Member** of the Research Group (RG) DevOps Performance Working Group of the Standard Performance Evaluation Corporation (SPEC). RG DevOps Performance Working Group is a forum for researchers and industries interested in the interaction between DevOps and performance engineering. The mission of the working group is to consolidate concepts and tools to better integrate these activities.

International Members:

- Concordia University
- Imperial College London
- Kiel University
- Karlsruhe Institute of Technology
- NovaTec Consulting GmbH
- University of Alberta
- University of Stuttgart
- University of Würzburg
- University of L'Aquila

**Co-Coordinator** RG subgroup Search-Based Software Performance Engineering The objective of this new subgroup is the development of new approaches and research directions on the multi-criteria optimization of performance-related quality attributes in software architectures.

International members:

- André van Hoorn, University of Hamburg
- Sebastian Frank, University of Hamburg
- Vittorio Cortellessa, University of L'Aquila
- Daniele Di Pompeo, University of L'Aquila
- Michele Tucci, Charles University (Co-Coordinautore)
- Andres Diaz Pace, National *University* of Central Buenos Aires
- Pooyan Jamshidi, University of South Carolina

**Node coordinator** in the System and Service Quality CINI Working Group. The Working Group aims to make available its cultural and scientific heritage and consolidated experience in the development of methodologies and approaches that allow the required levels of quality of IT services to be maintained.

National Members:

- Università di Torino
- Università degli Studi di Salerno
- Università degli Studi di Napoli Federico II
- Università degli Studi di Firenze
- Università del Piemonte Orientale
- Università Ca' Foscari Venezia
- Università Vanvitelli
- Università degli Studi del Sannio di Benevento
- Università del Salento
- Scuola IMT Alti Studi Lucca
- Università degli Studi di Roma Tor Vergata
- Università degli Studi di Milano
- Università di Camerino
- Università di Bologna
- Università degli Studi di Bari Aldo Moro
- Scuola Superiore Sant'Anna
- Università degli Studi di Roma "La Sapienza"
- Politecnico di Torino
- Gran Sasso Science Institute
- Università degli studi dell'Aquila
- Università degli Studi di Messina
- Università di Pisa
- Università degli Studi di Milano

**Member** of the Quantitative Computing (InfQ) research group



The group is currently made up of 12 research groups distributed throughout the national territory and corresponding to 12 universities.

National Members:

- Politecnico di Milano (Danilo Ardagna, Marco Gribaudo, Giuseppe Serazzi)
- Sapienza Università di Roma (Emiliano Casalicchio, Bruno Ciciani)
- Scuola IMT Alti Studi Lucca (Rocco De Nicola, Mirco Tribastone)
- Università "Ca' Foscari" Venezia (Simonetta Balsamo, Andrea Marin, Sabina Rossi)
- Università degli Studi dell'Aquila (Vittorio Cortellessa, Antiniscia Di Marco, Daniele Di Pompeo, Michele Tucci)
- Università degli Studi della Campania "Luigi Vanvitelli" (Mauro Iacono)
- Università degli Studi di Bologna (Lorenzo Donatiello, Gustavo Marfia)
- Università degli Studi di Messina (Salvatore Distefano, Antonio Puliafito, Marco Scarpa)
- Università degli Studi di Pavia (Maria Carla Calzarossa, Luisa Massari)
- Università degli Studi di Roma "Tor Vergata" (Vittoria De Nitto Personè, Salvatore Tucci)
- Università degli Studi di Torino (Elvio Amparore, Susanna Donatelli, Matteo Sereno)
- Università del Piemonte Orientale (Giuliana Franceschinis)

**Member** of the research group “Software Performance Engineering Laboratory (SPENCER)” of the University of L'Aquila

**Member** of the research group on Performance Change Detection

Members:

- Université du Québec à Montréal
- University of L'Aquila
- Charles University

**Member** of the research group on Advanced Driver Assistance Systems (ADAS)

Members:

- Università degli Studi di Napoli Federico II
- Università degli Studi di Salerno
- Università degli studi dell'Aquila

**Member** of the research group on Performance Regression Testing

Members:

- Università degli Studi del Molise
- Università degli Studi di Salerno
- Università degli studi dell'Aquila
- Charles University

**Member** of the research group on Performance and Software Refactoring

Members:

- University of L'Aquila
- Charles University

- University of Molise
- Università della svizzera italiana

## **Organization and participation in program committees of international conferences and workshops**

### **Organizing Committees**

**Co-Chair** 1st International Workshop on Quality in Software Architecture (QUALIFIER 2023)

**Posters and Demos Chair** International Conference on Performance Engineering (ICPE 2023)

**Co-Chair** Workshop on Challenges in Performance Methods for Software Development WOSP-C 2023

**Co-Chair** 1st Working day of System and Service Quality CINI Working Group

**Co-Chair** Workshop on Challenges in Performance Methods for Software Development WOSP-C 2022

**Publication Chair** International Conference on Performance Engineering (ICPE 2021)

**Web Chair** International Conference on Performance Engineering (ICPE 2017)

**Co-Chair** 1st CINI University Challenge 2017

### **Program Committees**

**Member** within the Artifact Evaluation Committee of International Conference on Software Engineering (ICSE 2024)

**Member** within the Program Committee of European Conference on Software Architecture (ECSA 2023)

**Member** within the Program Committee of IEEE International Conference on Software Architecture (ICSA 2023)

**Member** within Artifact Evaluation Committee of International 53rd Annual IEEE/IFIP International Conference on Dependable Systems and Networks (DSN 2023)

**Member** within the Data Challenge Track Committee of International Conference on Software Performance Engineering (ICPE 2023)

**Member** within the Junior Program Committee of International Conference on Mining Software Repositories (MSR 2023)

**Member** within the Program Committee of Workshop on Artificial Intelligence for Performance Modeling, Prediction, and Control (AiPerf 2023)

**Member** within the Program Committee of Workshop on Load Testing and Benchmarking of Software Systems (LTB 2023)

**Member** within the Program Committee of International Workshop on Model-Driven Engineering for Software Architecture (MDE4SA 2023)

**Member** within the Work-in-Progress & Vision Committee of International Workshop on Modeling Language Engineering (ICPE 2022)

**Member** within the Program Committee of International Workshop on Modeling Language Engineering (MLE 2022)

**Member** within the Artifact Evaluation Committee of Automated Software Engineering (ASE 2022)

**Member** within the Program Committee of Automated and verifiable Software sYstem DEvelopment (ASYDE 2022)

**Member** within the Artifact Evaluation Committee of Automated Software Engineering (ASE 2021)

**Member** within the Artifact evaluation Committee ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2021)

**Member** within the Shadow Program Committee of International Conference on Mining Software Repositories (MSR 2021)

**Member** within the Program Committee of International Workshop on Modeling Language Engineering (MLE 2021)

**Member** within the Demo Committee of International *Conference* on Pervasive Computing and Communications (PerCom 2021)

**Member** within the Artifact Evaluation Committee of International Conference on Performance Engineering (ICPE 2020)

**Member** within the Demo Committee of International *Conference* on Pervasive Computing and Communications (PerCom 2020)

## **Speaker at national and international congresses and conferences**

### **Speaker**

Daniele Di Pompeo and Michele Tucci.

"Many-Objective Optimization of Non-Functional Attributes based on Refactoring of Software Models."

3rd International Workshop on Model-Driven Engineering for Software Architecture (MDE4SA 2023).

### **Speaker**

Daniele Di Pompeo and Michele Tucci.

"Search Budget in Multi-Objective Refactoring Optimization: a Model-Based Empirical Study."

48th Euromicro Conference on Software Engineering and Advanced Applications (SEAA 2022).

### **Speaker**

Vittorio Cortellessa, Daniele Di Pompeo, Luca Traini, and Michele Tucci.

"Multi-Objective Optimization of Non-Functional Attributes based on Refactoring of Software Models."

1st Conference on System and Service Quality (QualITA 2022).

### **Speaker**

Cortellessa, Vittorio, Daniele Di Pompeo, Vincenzo Stoico, and Michele Tucci.

"On the impact of Performance Antipatterns in multi-objective software model refactoring optimization."

47th Euromicro Conference on Software Engineering and Advanced Applications (SEAA 2021)

### **Speaker**

Arcelli, Davide, Vittorio Cortellessa, and Daniele Di Pompeo.

"Performance-driven software model refactoring."

Journal First track of the 26th IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER 2019)

### **Speaker**

Davide Arcelli, Vittorio Cortellessa and Daniele Di Pompeo.

"A metamodel for the specification and verification of model refactoring actions".

2nd International Workshop on Refactoring (IWor 2018)

### **Speaker**

Vittorio, Cortellessa, Antinisca, Di Marco, Daniele, Di Pompeo, Francesco, Gallo, Stefano, Pace, Luigi, Pomante and Walter, Tiberti.

"Energy-driven reconfiguration of applications for Wireless Sensor Networks."

8th ACM/SPEC on International Conference on Performance Engineering Companion (EnergySim 2018)

### **Speaker**

Di Pompeo, Daniele, Incerto, Emilio, Muttillio, Vittoriano, Pomante, Luigi, Valente, Giacomo.

"An Efficient Performance-Driven Approach for HW/SW Co-Design."

8th ACM/SPEC on International Conference on Performance Engineering (ICPE 2017)

### **Speaker**

Arcelli, Davide, Vittorio Cortellessa, and Daniele Di Pompeo.

"Automated translation among EPSILON languages for performance-driven UML software model refactoring."

1st International Workshop on Software Refactoring (IWor 2016)

## **Invited Talks**

**University of Hamburg**, invited by Andrè van Hoorn, (Virtual April 19, 2022)

Talk title: Quality-centric Continuous Software Engineering

**SPEC DevOps Research Group**, (Virtual October 22, 2021)

Talk title : "On the impact of performance antipatterns in multi-objective software model refactoring optimization"

**SPEC DevOps Research Group**, (Virtual June 9, 2020)

Talk title : "Run-time/Design-time Interactions for Performance Assessment"

## **Research Publication**

### **2023**

#### Journal Paper

Luca Traini, Vittorio Cortellessa, Daniele Di Pompeo, and Michele Tucci. "Towards effective assessment of steady state performance in Java software: Are we there yet?" Empirical Software Engineering (EMSE), 28(1), 1-57.

#### Journal Paper

Cortellessa, Vittorio, Daniele Di Pompeo, Vincenzo Stoico, and Michele Tucci. "Many-objective optimization of non-functional attributes based on refactoring of software models." Information and Software Technology 157 (2023): 107159.

### Conference Paper

Basciani, Francesco, Daniele Di Pompeo, Juri Di Rocco, and Alfonso Pierantonio. "A customizable approach to assess software quality through Multi-Criteria Decision Making." arXiv preprint arXiv:2301.12202 (2023).

### Conference Paper

Di Pompeo, Daniele, and Michele Tucci. "Quality Attributes Optimization of Software Architecture: Research Challenges and Directions." *arXiv preprint arXiv:2301.07516* (2023).

### Conference Paper

Di Pompeo, Daniele, and Michele Tucci. "Multi-objective Software Architecture Refactoring driven by Quality Attributes." arXiv preprint arXiv:2301.07500 (2023).

## **2022**

### Journal Paper

Cortellessa, Vittorio, Daniele Di Pompeo, Romina Eramo, and Michele Tucci. "A model-driven approach for continuous performance engineering in microservice-based systems." *Journal of Systems and Software (JSS)* Volume 183, 2022, pp. 111084.

### Journal Paper

Traini, Luca, Daniele Di Pompeo, Michele Tucci, Bin Lin, Simone Scalabrino, Gabriele Bavota, Michele Lanza, Rocco Oliveto, and Vittorio Cortellessa. "How Software Refactoring Impacts Execution Time." *ACM Trans. Softw. Eng. Methodol (TOSEM)*. 31, 2, Article 25 (April 2022), 23 pages.

### Conference Paper

Vittorio Cortellessa, Daniele Di Pompeo, Vincenzo Stoico and Michele Tucci. "Software Model Refactoring Driven by Performance Antipattern Detection." *SIGMETRICS Perform. Evaluation Rev.*, 2022, 49(4), pp. 53–58.

### Conference Paper

Daniele Di Pompeo, and Michele Tucci. "Search Budget in Multi-Objective Refactoring Optimization: a Model-Based Empirical Study." 48th Euromicro Conference on Software Engineering and Advanced Applications (SEAA), pp. (to-appear). IEEE, 2022.

## **2021**

### Journal Paper

Vittorio Cortellessa and Daniele Di Pompeo. "Analyzing the sensitivity of multi-objective software architecture refactoring to configuration characteristics". *Information and Software Technology (INFISOFT)* Volume 135, 2021, pp. 106568.

#### Conference Paper

Cortellessa, Vittorio, Daniele Di Pompeo, Vincenzo Stoico, and Michele Tucci. "On the impact of Performance Antipatterns in multi-objective software model refactoring optimization." 47th Euromicro Conference on Software Engineering and Advanced Applications (SEAA), pp. 224-233. IEEE, 2021.

#### Conference Paper

Francesco Basciani, Daniele Di Pompeo, Davide Di Ruscio, Ludovico Iovino and Alfonso Pierantonio. "Integrating semantic reasoning in information loss-based transformation chain rankers". 36th ACM/SIGAPP Symposium on Applied Computing, pp. 1494–1503. ACM, 2021.

### **2019**

#### Conference Paper

Davide Arcelli, Vittorio Cortellessa, Daniele Di Pompeo, Romina Eramo and Michele Tucci. "Exploiting Architecture/Runtime Model-Driven Traceability for Performance Improvement". IEEE International Conference on Software Architecture, ICSA, pp.81–90. IEEE, 2019.

#### Conference Paper

Daniele Di Pompeo, Michele Tucci, Alessandro Celi and Romina Eramo. "A Microservice Reference Case Study for Design-Runtime Interaction in MDE". 2nd International Workshop on Model-Driven Engineering for Design-Runtime Interaction in Complex Systems, pp. 23–32. CEUR-WS.org, 2019.

#### Conference Paper

Davide Arcelli, Vittorio Cortellessa and Daniele Di Pompeo. "Automating Performance Antipattern Detection and Software Refactoring in UML Models". 26th IEEE International Conference on Software Analysis, Evolution and Reengineering, pp. 640–643. SANER. IEEE, 2019.

### **2018**

#### Journal Paper

Arcelli, Davide, Vittorio Cortellessa, and Daniele Di Pompeo. "Performance-driven software model refactoring." Information and Software Technology Volume 95, 2018, pp. 366-397.

#### Conference Paper

Davide Arcelli, Vittorio Cortellessa and Daniele Di Pompeo. "A metamodel for the specification and verification of model refactoring actions". 2nd International Workshop on Refactoring, pp. 14–21. ACM, 2018.

#### Conference Paper

Vittorio, Cortellessa, Antinisca, Di Marco, Daniele, Di Pompeo, Francesco, Gallo, Stefano, Pace, Luigi, Pomante and Walter, Tiberti. "Energy-driven reconfiguration of applications for Wireless

Sensor Networks." In Proceedings of the 8th ACM/SPEC on International Conference on Performance Engineering Companion, pp. 79–84. ACM,2018.

#### Conference Paper

Arcelli, Davide, Cortellessa, Vittorio, Mattia, D'Emidio, Daniele and Di Pompeo. "EASIER: an Evolutionary Approach for multi-objective Software architecture Refactoring." In 2018 IEEE International Conference on Software Architecture (ICSA), pp. 105-114. IEEE, 2018.

### **2017**

#### Conference Paper

Di Pompeo, Daniele, Incerto, Emilio, Muttillio, Vittoriano, Pomante, Luigi, Valente, Giacomo. "An Efficient Performance-Driven Approach for HW/SW Co-Design." Proceedings of the 8th ACM/SPEC on International Conference on Performance Engineering. ACM, 2017.

#### Conference Paper

Arcelli, Davide, and Daniele Di Pompeo. "Applying Design Patterns to Remove Software Performance Antipatterns: A Preliminary Approach." Procedia Computer Science 109 (2017): 521-528.

### **2016**

#### Conference Paper

Arcelli, Davide, Vittorio Cortellessa, and Daniele Di Pompeo. "Automated translation among EPSILON languages for performance-driven UML software model refactoring." Proceedings of the 1st International Workshop on Software Refactoring. ACM, 2016.

### **2015**

#### Conference Paper

Arcelli, Davide, Vittorio Cortellessa, and Daniele Di Pompeo. "Towards a Unifying Approach for Performance-Driven Software Model Refactoring." GEMOC+ MPM@ MoDELS. 2015.

## **National and international awards and honors**

### **2023**

Best poster award - International Conference on Software Architecture 2023

*Di Pompeo, Daniele, and Michele Tucci.*

*"Multi-objective Software Architecture Refactoring driven by Quality Attributes." arXiv preprint arXiv:2301.07500 (2023).*



## **Review activities for International Journals**

- Software: Practice and Experience (SPE 2017)
- Journal of Information and Software Technology (INFSOFT 2022, 2021)
- Journal of Systems and Software (JSS 2023, 2022)
- Transaction on Software Engineering (TSE 2023, 2022, 2021)
- Empirical Software Engineering (EMSE 2022, 2018)
- Scientific Reports (2023)
- Journal of Computer Languages (COLA 2023)

## **Review activities for International Conference**

- International Conference on Performance Engineering (ICPE 2022, 2020, 2019, 2018, 2017, 2016)
- International Conference on Automated Software Engineering (ASE 2022, 2021, 2017, 2016)
- International Conference on Software Engineering (ICSE 2017)
- Workshop on Challenges in Performance Methods for Software Development (WOSP-C 2017)
- International Conference on Software Architecture (ICSA 2023, 2021, 2020, 2018)
- International Conference on the Quality of Information and Communications Technology (QUATIC 2018)
- International Conference on Fundamental Approaches to Software Engineering (FASE 2019)
- International Conference on Pervasive Computing and Communications (PerCom 2021, 2020)
- Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2021)
- International Conference on Model Driven Engineering Languages and Systems (MODELS, 2022)