

# Fabio Palomba, Ph.D.

Curriculum Vitae – 15<sup>th</sup> May 2025

## 1 PERSONAL INFORMATION

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**Name:** Fabio Palomba

**Date of Birth:** 3rd August, 1989

**Place of Birth:** Naples, Italy

**Address:** Via Giovanni Falcone, 41

84081 Baronissi (SA), Italy

**Phone:** +39 3477460798

**E-mail:** fpalomba@unisa.it

**Website:** <https://fpalomba.github.io/>

**Google Scholar profile:** <https://goo.gl/dorFrh>

## 2 JOB POSITIONS

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- 2025 – now**     **ASSOCIATE PROFESSOR**  
*Department of Computer Science - University of Salerno, Italy*
- 2023 - 2025**     **SENIOR ASSISTANT PROFESSOR (RTD-B)**  
*Department of Computer Science - University of Salerno, Italy*
- 2019 - 2022**     **JUNIOR ASSISTANT PROFESSOR (RTD-A)**  
*Department of Computer Science - University of Salerno, Italy*
- 2018 - 2019**     **SENIOR RESEARCH ASSOCIATE**  
*Zurich Empirical Software Engineering Team - University of Zurich, Switzerland*
- 2017**     **POST-DOC RESEARCHER**  
*Delft University of Technology (The Netherlands) and Eindhoven University of Technology (The Netherlands)*

## 3 QUALIFICATIONS/LICENCES

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- 2020**     **ITALIAN SCIENTIFIC QUALIFICATION AS FULL PROFESSOR.**  
*Sector 01/B1 – Informatica.*  
*Evaluation available at: <https://asn18.cineca.it/pubblico/miur/esito-abilitato/01%252FB1/1/4>.*
- 2019**     **ITALIAN SCIENTIFIC QUALIFICATION AS FULL PROFESSOR.**  
*Sector 09/H1 – Sistemi di Elaborazione delle Informazioni*  
*Evaluation available at: <https://asn18.cineca.it/pubblico/miur/esito-abilitato/09%252FH1/1/3>.*
- 2019**     **ITALIAN SCIENTIFIC QUALIFICATION AS ASSOCIATE PROFESSOR.**  
*Sector 01/B1 – Informatica.*  
*Evaluation available at: <https://asn18.cineca.it/pubblico/miur/esito/01%252FB1/2/1>.*
- 2019**     **ITALIAN SCIENTIFIC QUALIFICATION AS ASSOCIATE PROFESSOR.**  
*Sector 09/H1 – Sistemi di Elaborazione delle Informazioni*  
*Evaluation available at: <https://asn18.cineca.it/pubblico/miur/esito/09%252FH1/2/1>.*
- 2014**     **LICENCE OF COMPUTER ENGINEER**  
*University of Molise, Italy*

## 4 EDUCATION

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- 2017**      **DEGREE OF EUROPEAN DOCTOR OF PHILOSOPHY (Ph.D.) IN MANAGEMENT & INFORMATION TECHNOLOGY**  
*University of Salerno, Italy*  
Funded by University of Salerno and University of Molise.  
Advisor: Prof. Andrea De Lucia
- 2013**      **MASTER'S DEGREE (M.Sc.) IN COMPUTER SCIENCE**  
*University of Salerno, Italy*  
110/110 magna cum laude and special commendation by the commission  
Advisor: Prof. Andrea De Lucia
- 2011**      **BACHELOR'S DEGREE (B.Sc.) IN COMPUTER SCIENCE**  
*University of Molise, Italy*  
110/110 cum laude  
Advisor: Prof. Rocco Oliveto

## 5 RESEARCH

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### 5.1 SUMMARY OF THE MAIN RESEARCH TOPICS AND ACHIEVEMENTS

My research activity is around Software Engineering and is mainly focused (but not limited) to the following topics:

- Bad Code Smell Detection and Management;
- Test Code Quality;
- Bug Prediction;
- Mobile Software Engineering;
- Social Aspects in Software Engineering;
- Traceability Management;
- Software Engineering with and for Artificial Intelligence;
- Mining Software Repositories;
- Empirical Software Engineering.

In these research topics I have published around 200 papers in international journals and conferences indexed in DBLP, SCOPUS (number of citations = 7,212; h-index = 49), and Google Scholar (number of citations = 11,953; h-index = 61). My overall m-index (that is, the h-index normalized by the number of years of activity) is 4.9 and 6 considering SCOPUS and Google Scholar, respectively. I have been the recipient of **two ACM/SIGSOFT Distinguished Paper Awards**, **one IEEE/TCSE Distinguished Paper Award**, **one Best Paper Award Honorable Mention**, **multiple Best Paper Awards**, and **one bronze medal at the ACM/SIGSOFT Student Research Competition**. Furthermore, **my PhD Thesis has been the recipient of the 2017 IEEE Computer Society Best Thesis Award**. In 2023, I was awarded the prestigious **IEEE/TCSE Rising Star Award** for my contribution to the research on software refactoring and code smell detection. In addition, I have been the recipient of **18 Outstanding/Distinguished Reviewer Awards** for my review activities.

My research significantly contributes to the **design and evolution of efficient and dependable software systems**, particularly in the context of **distributed, autonomous, and AI-enabled applications**. I have developed and evaluated methodologies to enhance **reliability** and **performance, especially in critical environments such as mobile, cloud-based, and AI-intensive systems**. These contributions are reflected in my projects (e.g., PRIN, SNSF Ambizione) and publications (e.g., J1, J4, J66).

In the following, I describe the main research topics of interest with reference to the published or submitted results.

**Bad Code Smell Detection and Management:** Bad code smells have been defined by Martin Fowler as symptoms of poor design and implementation choices. Bad smells are usually introduced in software systems because developers poorly

conceived the design of a code component. Complex Class, *i.e.*, a class that contain complex methods and it is very large in terms of LOC; or God Class, *i.e.*, a class that does too much/ knows too much about other classes, are only some examples of a plethora of bad smells identified in well-known catalogues. Recent empirical studies showed that code smells hinder comprehensibility, and possibly increase change- and fault- proneness. For these reasons, the main research topics in this area are the definition of new approaches able to (i) detect bad code smells in the source code [C2, C5, C11, C19, J1]; (ii) study the reason behind their introduction and removal [C4, J4, J8]; (iii) study the impact of code smells on non-functional attributes of source code [C3, C20, J7, J10, J11], and (iv) recommend their removal via appropriate refactoring operations [C1, C6, C21, J2].

**Test Code Quality:** Test cases form the first line of defense against the introduction of software faults. As such, with the help of testing framework like, for instance, Junit developers create test methods and run these periodically on their code. To support the testing activities, the research community mainly focused on the definition of techniques and tools for (i) the automatic generation of test cases, or (ii) the improvement of the effectiveness of test classes with respect to code coverage. In this context, a little knowledge on the impact and the usefulness of code quality is available. The main research topic in this area relates to the definition of quality-aware methodologies for the automatic generation of test cases [C12] and the investigation of the impact of test smells, *i.e.*, symptoms of the presence of bad design choices in test code, on the effectiveness [C23] and the maintainability of test cases [C10, C14].

**Bug Prediction:** Allocating resources for the testing and the verification of all the parts of a large software system is a cost-prohibitive task. To alleviate this issue, prediction models able to identify portions of source code more prone to contain bugs have been the object of several studies. **Bug prediction models are essential for ensuring the reliability of complex and distributed software systems.** The main research topic is the definition of accurate prediction models that, on the one hand use a suitable set of predictors able to characterize the bug-proneness of code components [C8, C13, C25, J5], and on the other hand is able to use appropriate machine learning techniques to distinguish those components affected by bug [J6].

**Mobile Software Engineering:** According to recent statistics, over two billion users rely on smartphones and tablets to perform their daily activities. Not only do users play games or send messages, they use mobile apps for every type of need, including social and emergency connectivity. Mobile software engineering is the field responsible for the definition of techniques able to improve the life of both mobile developers and end users. The main research topic includes the application of mining software repositories techniques in the context of user reviews, with the goal of extracting actionable knowledge to incorporate in novel techniques and tools helping developers in performing their activities [C9, C16, C28, C29, J9]. **The techniques developed for analyzing mobile applications often target distributed environments and require efficient and dependable execution models.**

**Social Aspects in Software Engineering:** The success of software engineering projects is in large part dependent on social and organizational aspects of the development community. Indeed, as envisioned by the National Knowledge and Innovation Agenda ICT 2016 – 2019 in the Netherlands, *“software and system complexity is not solely of technological nature but also defined by people and processes”*. In the context, the role played by social aspects in software engineering has been mainly investigated in terms of socio-technical congruence, *i.e.*, the coordination between social relationships and technical aspects of the source code. However, a few knowledge on the impact of social debt, *i.e.*, sub-optimal characteristics or patterns across the organizational structure around a software system that may lead to additional unforeseen project costs, is available [Grant-1]. Key research topics in this area regard the understanding of the interplay between social and technical debt [C27], as well as the definition of techniques and tools able to make developers and project managers aware of the presence of social debt in the community [J13].

**Traceability Management:** Traceability has been defined as “the ability to describe and follow the life of an artifact, in both a forwards and backwards direction”. Thus, traceability links help software engineers to understand the relationships and dependencies among various software artifacts (requirements, code, tests, models, etc.) developed during the software lifecycle. The two main research topics related to the traceability management are event-based systems for traceability management and information retrieval-based methods and tools supporting the software engineer in the traceability link recovery [C9, C16, C29, J9].

**Software Engineering with and for Artificial Intelligence:** Software Engineering with and for Artificial Intelligence (AI) involves leveraging AI techniques and methodologies to enhance various aspects of software engineering processes and outcomes. **These methodologies are foundational for the development of autonomous systems that need to ensure high reliability and performance under uncertain environments.** The two main research areas relate to improving the way AI can assist developers during software engineering tasks [C85, J60-J62] and defining novel software engineering practices and

instruments to enable trustworthy AI [C81, C84, J66]. In most cases, advances in these fields are driven by empirical analyses and experiments aiming at informing the synergies between software engineering and artificial intelligence [C82, C83, J67].

**Mining Software Repositories:** Software repositories such as source control systems, archived communications between project personnel, and defect tracking systems are used to help in managing the progress of software projects. Software practitioners and researchers recognize the benefits of mining this information to support the maintenance and the evolution of software systems by improving software design/reuse and empirically validating novel ideas and techniques. Research is now proceeding to uncover the ways in which mining these repositories can help to understand software development and software evolution [C2, C4, C5, C10, C11, C13, C14, C17, C20, C21, C22, J1-J14], to support predictions about software development [J5, J6, J10, J10], and to exploit this knowledge in planning future development [C9, C16, J7].

**Empirical Software Engineering:** Empirical software engineering is a sub-domain of software engineering focusing on experiments on software systems (software products, processes, and resources). It is interested in devising experiments on software [J1], in collecting data from these experiments [J3], and in devising laws and theories from this data [C4, C14, J4]. Proponents of experimental software engineering advocate that the nature of software is such that we can advance the knowledge on software through experiments only. The scientific method suggests a cycle of observations, laws, and theories to advance science. Empirical software engineering applies this method to software.

## 5.2 PH.D. STUDENTS ADVISING/CO-ADVISING

I have/had the honour to advise or co-advise the following Ph.D. students and researchers:

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|---------------------------|--|
| <b>2025 -<br/>current</b> | <b>MATTEO CICALES</b><br><i>Research Assistant at the University of Salerno, working on topics connected to the security of machine learning-enabled software systems. Co-advisor: Prof. Dario Di Nucci. Google Scholar page:</i><br><a href="https://scholar.google.com/citations?user=TE-dfuMAAAAJ&amp;hl=it&amp;oi=ao">https://scholar.google.com/citations?user=TE-dfuMAAAAJ&amp;hl=it&amp;oi=ao</a>       |
| <b>2024 -<br/>current</b> | <b>ALESSANDRA PARZIALE</b><br><i>Research Assistant at the University of Salerno, working on topics connected to the fairness of machine learning-enabled software systems. Co-advisor: Prof. Andrea De Lucia. Google Scholar page:</i><br><a href="https://scholar.google.com/citations?user=c7uV7wIAAAAJ&amp;hl=it&amp;oi=ao">https://scholar.google.com/citations?user=c7uV7wIAAAAJ&amp;hl=it&amp;oi=ao</a> |
| <b>2024 -<br/>current</b> | <b>ALFONSO CANNAVALE</b><br><i>Research Assistant at the University of Salerno, working on topics connected to the testing of machine learning-enabled software systems. Co-advisor: Prof. Andrea De Lucia. Google Scholar page:</i><br><a href="https://scholar.google.com/citations?user=DbUDUT8AAAAJ&amp;hl=it&amp;oi=ao">https://scholar.google.com/citations?user=DbUDUT8AAAAJ&amp;hl=it&amp;oi=ao</a>    |
| <b>2024 -<br/>current</b> | <b>ANTONIO DELLA PORTA</b><br><i>Ph.D. Student at the University of Salerno, working on topics connected to the quality aspects of prompt engineering techniques for Large Language Models. Google Scholar page:</i><br><a href="https://scholar.google.com/citations?user=tU51c0cAAAAJ&amp;hl=it&amp;oi=ao">https://scholar.google.com/citations?user=tU51c0cAAAAJ&amp;hl=it&amp;oi=ao</a>                    |
| <b>2023 -<br/>current</b> | <b>GIANMARIO VORIA</b><br><i>Ph.D. Student at the University of Salerno, working on topics connected to the engineering of fairness properties in machine learning-enabled software systems. Google Scholar page:</i><br><a href="https://scholar.google.com/citations?user=W6T8YkgAAAAJ&amp;hl=it&amp;oi=ao">https://scholar.google.com/citations?user=W6T8YkgAAAAJ&amp;hl=it&amp;oi=ao</a>                   |
| <b>2023 -<br/>current</b> | <b>VIVIANA PENTANGELO</b><br><i>Ph.D. Student at the University of Salerno, working on topics connected to the engineering of virtual reality and metaverse environments for educational purposes. Google Scholar page:</i><br><a href="https://scholar.google.com/citations?user=JLi4PnQAAAAJ&amp;hl=it&amp;oi=ao">https://scholar.google.com/citations?user=JLi4PnQAAAAJ&amp;hl=it&amp;oi=ao</a>             |
| <b>2022 -<br/>current</b> | <b>ALEXANDRA SHEYKINA</b><br><i>Research Assistant at the University of Salerno, working on topics connected to the engineering of security of machine learning-enabled software systems. Co-advisor: Prof. Andrea De Lucia. Personal webpage:</i><br><a href="https://www.linkedin.com/in/alexandra-sheykina-10762895/">https://www.linkedin.com/in/alexandra-sheykina-10762895/</a>                          |

- 2022 - current**     **GILBERTO RECUPITO**  
*Ph.D. Student at the University of Salerno, working on topics connected to the analysis, detection, and refactoring of artificial intelligence debt in machine learning-enabled software systems. Google Scholar page:*  
<https://scholar.google.com/citations?user=RI6vnGIAAAAJ&hl=it&oi=ao>
- 2022 - current**     **VINCENZO DE MARTINO**  
*Ph.D. Student at the University of Salerno, working on topics connected to the analysis and optimization of non-functional requirements in machine learning-enabled software systems. Google Scholar page:*  
<https://scholar.google.com/citations?user=XNgzY0IAAAAJ&hl=it&oi=ao>
- 2022 - current**     **DARIO DI DARIO**  
*Ph.D. Student at the University of Salerno, working on topics connected to the engineering of virtual reality and metaverse environments for educational purposes. Co-advisor: Prof. Carmine Gravino. Google Scholar page:*  
<https://scholar.google.com/citations?user=Zx7w0SYAAAAJ&hl=it&oi=ao>
- 2022 - 2023**     **CARMINE FERRARA**  
*Research Assistant at the University of Salerno, working on topics connected to the engineering of fairness properties in machine learning-enabled software systems. Co-advisor: Prof. Andrea De Lucia. After the research fellowship, Carmine is currently a Software Engineer at NTT Data Italy Personal webpage:*  
<https://www.linkedin.com/in/carmine-ferrara-67412a167/>
- 2021 - 2024**     **STEFANO LAMBIASE**  
*Ph.D. Student at the University of Salerno, working on topics connected to the analysis of software ecosystems, with a particular focus on socio-technical concerns. Co-advisor: Prof. Filomena Ferrucci. After the Ph.D., Stefano is currently a Post-Doc Researcher at the University of Salerno (Italy). Google Scholar page:*  
<https://scholar.google.com/citations?user=2fHPedkAAAAJ&hl=it&oi=ao>
- 2021 - 2024**     **GIULIA SELLITTO**  
*Ph.D. Student at the University of Salerno, working on topics connected to the use of meta-heuristics for the identification of software vulnerabilities. Co-advisor: Prof. Filomena Ferrucci. After the Ph.D., Giulia is currently a High-School Teacher in Computer Science. Google Scholar page:*  
<https://scholar.google.com/citations?user=FIHGxnMAAAAJ&hl=it&oi=ao>
- 2021 - 2024**     **VALERIA PONTILLO**  
*Ph.D. Student at the University of Salerno, working on topics connected to test code quality, with a particular focus on the use of artificial intelligence for the identification of flaky tests. Co-advisor: Prof. Filomena Ferrucci. After the Ph.D., Valeria is currently a Post-Doc Researcher at the Gran Sasso Science Institute (Italy). Google Scholar page:*  
<https://scholar.google.com/citations?user=rhiPYd4AAAAJ&hl=it&oi=ao>
- 2021 - 2024**     **GIAMMARRIA GIORDANO**  
*Ph.D. Student at the University of Salerno, working on topics connected to the identification of privacy concerns in software projects using artificial intelligence techniques. Co-advisor: Prof. Filomena Ferrucci. After the Ph.D., Giammarrina is currently a Post-Doc Researcher at the University of Salerno (Italy). Google Scholar page:*  
<https://scholar.google.com/citations?user=nrk-z3oAAAAJ&hl=it&oi=ao>
- 2020 - 2024**     **EMANUELE IANNONE**  
*Ph.D. Student at the University of Salerno, working on topics connected to the analysis and automated detection/refactoring of software vulnerabilities. After the Ph.D., Emanuele is currently a Post-Doc Researcher at the Institute of Software Security at Hamburg University of Technology (Germany). Google Scholar page:*  
<https://scholar.google.com/citations?user=tjOanfQAAAAJ&hl=it&oi=ao>
- 2020 - 2024**     **MANUEL DE STEFANO**  
*Ph.D. Student at the University of Salerno, working on topics connected to the code smell detection and refactoring. Co-advisor: Prof. Andrea De Lucia. After the Ph.D., Manuel is currently a Data Scientist at CINECA (Italy). Google Scholar page:*  
<https://scholar.google.com/citations?user=6fELld4AAAAJ&hl=it&oi=ao>

- 2019 – 2022** **LARISSA BRAZ**  
*Ph.D. Student at the University of Zurich, working on topics connected to the software testing and vulnerabilities - hired under the Ambizione project of which I am scientific coordinator. Co-advisor: Prof. Alberto Bacchelli. After the Ph.D., Larissa is currently a Security Engineer at Google (Switzerland). Google Scholar page:*  
<https://scholar.google.com/citations?user=k-Yh9ZQAAAAJ&hl=it&oi=ao>
- 2019 – 2021** **FABIANO PECORELLI**  
*Ph.D. Student at the University of Salerno, working on topics connected to software testing and code smell detection. Co-advisor: Prof. Andrea De Lucia. After the Ph.D., Fabiano is currently an Associate Professor at Pegaso University (Italy). Google Scholar page:*  
<https://scholar.google.com/citations?user=HVvH1tYAAAAJ&hl=it&oi=ao>
- 2018 – 2020** **GIOVANNI GRANO**  
*Ph.D. Student at the University of Zurich, working on topics connected to software testing. I had the role of mentor in the context of the Giovanni's Ph.D. The official advisor was Prof. Harald C. Gall. After the Ph.D., Giovanni is currently a Senior Software Engineering at LocalStack (Switzerland). Google Scholar page:*  
<https://scholar.google.com/citations?user=UuGF6ScAAAAJ&hl=it&oi=ao>

## 6 TEACHING

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### 6.1 LECTURER

- 2024 - current** **SOFTWARE PROJECT MANAGEMENT**  
*Co-lecturer at the Master's Degree of Computer Science at the University of Salerno. ETCS: 2 (16 hours)*  
*Webpage:* [https://docenti.unisa.it/027888/didattica?anno=2024&id=507519&cld=10004-2016&pId=N0\\*N0\\*S1](https://docenti.unisa.it/027888/didattica?anno=2024&id=507519&cld=10004-2016&pId=N0*N0*S1)
- 2023 - current** **SCIENTIFIC WRITING AND PUBLISHING**  
*Lecturer at the Ph.D. Degree of Computer Science at the University of Salerno. ETCS: 1.5 (9 hours)*  
*Webpage:* [https://docenti.unisa.it/027888/didattica?anno=2024&id=516485&cld=10000-2024&pId=N0\\*N0\\*S1](https://docenti.unisa.it/027888/didattica?anno=2024&id=516485&cld=10000-2024&pId=N0*N0*S1)
- 2022 - 2023** **EMPIRICAL RESEARCH METHODS**  
*Co-Lecturer at the Ph.D. Degree of Computer Science at the University of Salerno. ETCS: 1.5 (9 hours)*  
*Webpage:* [https://docenti.unisa.it/027888/didattica?anno=2022&id=516492&cld=10000-2022&pId=N0\\*N0\\*S2](https://docenti.unisa.it/027888/didattica?anno=2022&id=516492&cld=10000-2022&pId=N0*N0*S2)
- 2021 - current** **SOFTWARE ENGINEERING FOR ARTIFICIAL INTELLIGENCE**  
*Lecturer at the Master's Degree of Computer Science at the University of Salerno. ETCS: 6 (48 hours)*  
*Webpage:* [https://docenti.unisa.it/027888/didattica?anno=2024&id=515112&cld=10007-2016&pId=N0\\*N0\\*S2](https://docenti.unisa.it/027888/didattica?anno=2024&id=515112&cld=10007-2016&pId=N0*N0*S2)
- 2021 - current** **SOFTWARE ENGINEERING**  
*Co-lecturer at the Bachelor's Degree of Computer Science at the University of Salerno. ETCS: 4.5 (36 hours)*  
*Webpage:* [https://docenti.unisa.it/027888/didattica?anno=2024&id=507546&cld=9999-2017&pId=MODULO\\_3\\*RESTO\\_1\\*S1](https://docenti.unisa.it/027888/didattica?anno=2024&id=507546&cld=9999-2017&pId=MODULO_3*RESTO_1*S1)
- 2020 – current** **PH.D. 101: A SEMINAR CYCLE**  
*Lecturer at the Ph.D. Degree of Computer Science at the University of Salerno.*
- 2020 – current** **FUNDAMENTALS OF ARTIFICIAL INTELLIGENCE**  
*Lecturer at the Bachelor's Degree of Computer Science at the University of Salerno. ETCS: 6 (48 hours)*  
*Webpage:* [https://docenti.unisa.it/027888/didattica?anno=2024&id=511550&cld=9999-2017&pId=N0\\*N0\\*S1](https://docenti.unisa.it/027888/didattica?anno=2024&id=511550&cld=9999-2017&pId=N0*N0*S1)
- 2018 - 2022** **SOFTWARE DEPENDABILITY**  
*Lecturer at the Master's Degree of Computer Science at the University of Salerno. ETCS: 9 (72 hours)*  
*Webpage:* [https://docenti.unisa.it/027888/didattica?anno=2021&id=512708&cld=10006-2016&pId=N0\\*N0\\*S2](https://docenti.unisa.it/027888/didattica?anno=2021&id=512708&cld=10006-2016&pId=N0*N0*S2)

- 2018 - SOFTWARE TESTING**  
**2019** *Co-Lecturer at the Bachelor's and Master's Degrees (joint course) of Computer Science at the University of Zurich. ETCS: 3 (24 hours)*
- 2018 - ADVANCED SOFTWARE ENGINEERING**  
**2019** *Lecturer at the Bachelor's Degree of Computer Science at the University of Zurich. ETCS: 3 (24 hours)*
- 2017 - SOFTWARE ENGINEERING METHODS**  
**2018** *Co-Lecturer at the Bachelor's Degree of Computer Science at the Delft University of Technology. ETCS: 3 (24 hours)*

## 6.2 TEACHING ASSISTANCE

- 2016 PROGRAMMING LANGUAGES**  
*Teaching Assistant in the course of Prof. Maurizio Tucci at the Bachelor Degree of Computer Science at the University of Salerno*
- 2016 PROGRAMMING LANGUAGES II**  
*Teaching Assistant in the course of Prof. Carmine Gravino at the Bachelor Degree of Computer Science at the University of Salerno*
- 2016 SOFTWARE ENGINEERING II: MAINTENANCE, EVOLUTION, AND SOFTWARE PROJECT MANAGEMENT**  
*Teaching Assistant and Students' Projects Evaluator in the course of Prof. Andrea De Lucia at the Master Degree of Computer Science at the University of Salerno*
- 2016 SOFTWARE ENGINEERING I**  
*Teaching Assistant and Students' Projects Evaluator in the course of Prof. Andrea De Lucia at the Bachelor Degree of Computer Science at the University of Salerno*
- 2015 SOFTWARE ENGINEERING II: MAINTENANCE AND TESTING**  
*Teaching Assistant and Students' Projects Evaluator in the course of Prof. Andrea De Lucia at the Master Degree of Computer Science at the University of Salerno*
- 2015 SOFTWARE ENGINEERING I**  
*Teaching Assistant and Students' Projects Evaluator in the course of Prof. Andrea De Lucia at the Bachelor Degree of Computer Science at the University of Salerno*
- 2014 IT PROJECT AND SERVICE MANAGEMENT**  
*Teaching Assistant and Students' Projects Evaluator in the course of Prof. Andrea De Lucia at the Master Degree of Management and Information Technology at the University of Salerno*
- 2014 DECISION SUPPORT SYSTEMS**  
*Teaching Assistant and Students' Projects Evaluator in the course of Prof. Andrea De Lucia at the Master Degree of Business Economy at the University of Salerno.*

## 6.3 THESES ADVISING/CO-ADVISING

- 2025** I am currently the advisor of around **70 Bachelor's and Master's students** on themes connected to software engineering, maintenance, and evolution, artificial intelligence, and empirical software engineering. The complete list will be available upon request.
- 2024** I have been the advisor of around **110 Bachelor's and Master's students** on themes connected to software engineering, maintenance, and evolution, artificial intelligence, and empirical software engineering. The

complete list will be available upon request.

- 2023** I have been the advisor of around **100 Bachelor's and Master's students** on themes connected to software engineering, maintenance, and evolution, artificial intelligence, and empirical software engineering. The complete list will be available upon request.
- 2022** I advised around **100 Bachelor's and Master's students** on themes connected to software engineering, maintenance, and evolution, artificial intelligence, and empirical software engineering. The complete list is available upon request.
- 2021** In 2021, I had the pleasure to advise **14 Bachelor's and Master's students**: Ivan Carmine Adamo, Angelo Afeltra, Cristian Barletta, Roberto Esposito, Simone Farina, Emanuele Fittipaldi, Emanuele Iaccarino, Vincenzo Emanuele Martone, Nicola Pagliara, Paolo Petta, Raimondo Rapacciuolo, Antonio Russo, Amine Mohamed Sarraj, Hermann Senatore.
- 2020** **CATCH ME IF YOU CAN: TOWARD AUTOMATIC EXPLOIT OF KNOWN VULNERABILITIES**  
*Student: Emanuele Iannone.*  
*Master Thesis – University of Salerno, Italy.*
- 2020** **UNDERSTANDING ARCHITECTURAL SMELLS: A NOVEL TOOL AND A FAMILY OF EMPIRICAL STUDIES**  
*Student: Manuel De Stefano. Advisor: Prof. Andrea De Lucia.*  
*Master Thesis – University of Salerno, Italy.*
- 2019** **CLASSIFYING SOURCE CODE QUALITY IMPROVEMENT OPPORTUNITIES IN CONTINUOUS INTEGRATION**  
*Student: Jonas Klass. Advisor: Prof. Alberto Bacchelli.*  
*Master Thesis – University of Zurich, Switzerland.*
- 2019** **LAMBDIFIED JAVA APIs: THE DEVELOPER'S PERSPECTIVE**  
*Student: Fernando Petruccio. Advisor: Prof. Alberto Bacchelli.*  
*Master Thesis – Joint project between University of Zurich, Switzerland, and University of Salerno, Italy.*
- 2019** **THE SECRET LIFE OF SOFTWARE VULNERABILITIES: AN EMPIRICAL STUDY**  
*Student: Roberta Guadagni. Advisor: Prof. Alberto Bacchelli.*  
*Master Thesis – Joint project between University of Zurich, Switzerland, and University of Salerno, Italy.*
- 2019** **ON THE EFFECTIVENESS OF MANUAL AND AUTOMATIC UNIT TEST GENERATION: TEN YEARS LATER**  
*Student: Domenico Serra.*  
*Master Thesis – Joint project between University of Zurich, Switzerland, and University of Salerno, Italy.*
- 2018** **CLASSIFYING THE ROOT CAUSE OF FLAKY TESTS**  
*Student: Moritz Eck. Advisor: Prof. Alberto Bacchelli*  
*Master Thesis – University of Zurich, Switzerland*
- 2017** **DETECTING CODE SMELLS IN MOBILE APPLICATIONS**  
*Students: Dustin Lim. Advisor: Prof. Andy Zaidman*  
*Master Thesis – Delft University of Technology, The Netherlands*
- 2017** **A FRAMEWORK FOR THE UI TESTING OF ANDROID AND IOS APPLICATIONS**  
*Students: René Vennik and Wim de With.*  
*Bachelor End Project – Delft University of Technology, The Netherlands*
- 2016** **A LARGE SCALE EMPIRICAL STUDY ON THE PERFORMANCES OF WITHIN- AND CROSS-PROJECT BUG PREDICTION MODELS**  
*Student: Salvatore Geremia. Advisor: Prof. Andrea De Lucia*  
*Master Thesis – University of Salerno, Italy*
- 2016** **A TOOL FOR MINING PERFORMANCE INDICATORS OF JAVA APPLICATIONS**  
*Student: Elisa D'Eugenio. Advisor: Prof. Andrea De Lucia*



*Master Thesis – University of Salerno, Italy*

- 2016**     **DESIGN AND IMPLEMENTATION OF A TOOL FOR EXPERIMENTING CROSS-PROJECT BUG PREDICTION MODELS**  
*Student: Pasquale Martiniello. Advisor: Prof. Andrea De Lucia*  
*Bachelor Thesis – University of Salerno, Italy*
- 2016**     **USING RANKING ALGORITHMS IN MINING USER REVIEWS: CHALLENGES AND OPPORTUNITIES**  
*Student: Michele Lotierzo. Advisor: Prof. Andrea De Lucia*  
*Bachelor Thesis – University of Salerno, Italy*
- 2016**     **DESIGN AND IMPLEMENTATION OF A TOOL FOR DETECTING TEXTUAL CODE SMELLS IN SOURCE CODE**  
*Student: Elena Sollai. Advisor: Prof. Andrea De Lucia*  
*Bachelor Thesis – University of Salerno, Italy*
- 2016**     **DESIGN AND IMPLEMENTATION OF A TOOL FOR RUNNING BUG PREDICTION EXPERIMENTATIONS**  
*Student: Fabiano Pecorelli. Advisor: Prof. Andrea De Lucia*  
*Bachelor Thesis – University of Salerno, Italy*
- 2015**     **MINING ENERGETIC CODE SMELLS IN ANDROID APPS**  
*Student: Antonio Prota. Advisor: Prof. Andrea De Lucia*  
*Master Thesis – University of Salerno, Italy*
- 2015**     **REFACTORING OF CODE SMELLS: AN EMPIRICAL STUDY**  
*Student: Fabio Soggia. Advisor: Prof. Andrea De Lucia*  
*Master Thesis – University of Salerno, Italy*
- 2015**     **AN ECLIPSE PLUG-IN FOR SUPPORTING CODE SMELL IDENTIFICATION VIA HISTORICAL INFORMATION: THE HIST PROJECT**  
*Student: Alessandro Longo. Advisor: Prof. Andrea De Lucia*  
*Bachelor Thesis – University of Salerno, Italy*
- 2014**     **ON THE ROLE OF DEVELOPERS' SCATTERING METRICS IN BUG PREDICTION**  
*Student: Dario Di Nucci. Advisor: Prof. Andrea De Lucia*  
*Master Thesis – University of Salerno, Italy*
- 2014**     **DESIGN AND IMPLEMENTATION OF AN ECLIPSE PLUG-IN FOR EXTRACTING ISSUES FROM THE BUGZILLA REPOSITORY**  
*Student: Davide De Chiara. Advisor: Prof. Andrea De Lucia*  
*Bachelor Thesis – University of Salerno, Italy*
- 2014**     **DESIGN AND IMPLEMENTATION OF AN ECLIPSE PLUG-IN FOR MINING GITHUB**  
*Student: Santolo Tubelli. Advisor: Prof. Andrea De Lucia*  
*Bachelor Thesis – University of Salerno, Italy*
- 2014**     **DESIGN AND IMPLEMENTATION OF AN ECLIPSE PLUG-IN FOR EXTRACTING QUALITY METRICS FROM SOURCE CODE**  
*Student: Gianmarco Del Pozzo. Advisor: Prof. Andrea De Lucia*  
*Bachelor Thesis – University of Salerno, Italy*

## 7 PROFESSIONAL ACTIVITIES

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### 7.1 COMMUNITY SHEPHERDING ACTIVITIES

- 2025-**     **ACM/SIGSOFT EXECUTIVE COMMITTEE MEMBER & CHAIR OF THE ACM/SIGSOFT CAPS PROGRAM**  
**2028**     ACM/SIGSOFT Executive Committee Member (<https://www2.sigsoft.org/execcontact/>), with responsibility to chair the ACM/SIGSOFT Travel Support and Childcare Assistance at Conferences Program (CAPS, <https://www2.sigsoft.org/caps/capsmain/>). The program aims at providing support for students and professionals to attend the conferences and events sponsored by ACM SIGSOFT. CAPS also provides support for

childcare. My role is to define and apply a process for ranking applications for students to attend SIGSOFT-sponsored conferences to receive travel funding.

## 7.2 STEERING COMMITTEE MEMBERSHIPS

- 2025-current**      **SANER – THE INTERNATIONAL CONFERENCE ON SOFTWARE ANALYSIS, EVOLUTION, AND REENGINEERING**  
*Steering Committee Member – Elected in 2025.*  
Link: <https://conf.researchr.org/committee/saner-2026/saner-2026-steering-committee>
- 2021-2024**      **ICPC – THE INTERNATIONAL CONFERENCE ON PROGRAM COMPREHENSION**  
*Steering Committee Member – Elected in 2021.*  
Link: <https://www.program-comprehension.org/steeringcommittee.html>
- 2020-current**      **MALTESQUE – THE INTERNATIONAL WORKSHOP ON MACHINE LEARNING TECHNIQUES FOR SOFTWARE QUALITY EVALUATION**  
*Steering Committee Member – Elected in 2020.*

## 7.3 ORGANIZATION COMMITTEE PARTICIPATION (SELECTED)

### 7.3.1 ORGANIZATIONAL COMMITTEE (CO-)CHAIR

- 2026**      **JOURNAL FIRST TRACK CHAIR**  
*9<sup>th</sup> International Conference on Technical Debt (TechDebt), Rio de Janeiro, Brazil.*
- 2025**      **STUDENT VOLUNTEER CHAIR**  
*51<sup>st</sup> Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Salerno, Italy.*
- 2024**      **SHONAN MEETING ORGANIZER**  
*Organizer of a Shonan Meeting on “Anti-patterns and Defects: Synergies, Challenges, and Opportunities”, Shonan, Japan.*
- 2024**      **LOCAL ARRANGEMENT CO-CHAIR**  
*17<sup>th</sup> International Conference on Evaluation and Assessment in Software Engineering (EASE 2024), Salerno, Italy.*
- 2024**      **PROGRAM CO-CHAIR**  
*IEEE International Conference on Software Analysis, Engineering, and Reengineering (SANER 2024), Rovaniemi, Finland.*
- 2023**      **ASSOCIATE CHAIR**  
*ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2023), Minneapolis, USA.*
- 2022**      **PROGRAM CO-CHAIR**  
*Working Seminar on Quantum Software Engineering (WQSE 2022), Innsbruck, Austria.*
- 2022**      **PROGRAM CO-CHAIR**  
*International Workshop on Software Quality Assurance for Artificial Intelligence (SQ4AI 2021), Honolulu, Hawaii, USA*
- 2022**      **NEW IDEAS AND EMERGING RESULTS (NIER) TRACK CO-CHAIR**  
*International Conference on Automated Software Engineering (ASE 2022), Ann Arbor, Michigan, USA*
- 2022**      **NEW IDEAS AND EMERGING RESULTS (NIER) TRACK CO-CHAIR**  
*International Conference on Mobile Software Engineering and Systems (MobileSoft 2022), Pittsburgh,*

Pennsylvania, USA

- 2022**      **NEW IDEAS AND EMERGING RESULTS (NIER) TRACK CO-CHAIR**  
*International Conference on Source Code Analysis and Manipulation (SCAM 2022), Limassol, Cyprus*
- 2022**      **FOSS AWARD CO-CHAIR**  
*International Conference on Mining Software Repositories (MSR 2022), Pittsburgh, Pennsylvania, USA*
- 2022**      **INDUSTRIAL TRACK CO-CHAIR**  
*International Conference on Software Analysis, Evolution, and Reengineering (SANER 2022), Honolulu, Hawaii, USA*
- 2021**      **PROGRAM CO-CHAIR**  
*International Conference on Program Comprehension (ICPC 2021), Madrid, Spain*
- 2021**      **SPECIAL ISSUE CHAIR**  
*International Conference on Open-Source Systems (OSS 2021), Lahti, Finland*
- 2021**      **ASSOCIATE CHAIR**  
*ACM Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2021), Virtual*
- 2019**      **CO-ORGANIZER**  
*International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTesQuE 2019), Tallinn, Estonia*
- 2018**      **PROGRAM CO-CHAIR**  
*Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTesQuE 2018), Campobasso, Italy*
- 2018**      **PUBLICITY CO-CHAIR**  
*International Conference on Software Analysis, Evolution, and Reengineering (SANER 2018), Campobasso, Italy*
- 2015**      **WEB CHAIR**  
*International Conference on Program Comprehension (ICPC 2015), Florence, Italy*

### 7.3.2 ORGANIZATIONAL COMMITTEE MEMBER

- 2026**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Software Engineering (ICSE), Ottawa, Canada.*
- 2025**      **PROGRAM COMMITTEE MEMBER**  
*IEEE/ACM International Conference on Automated Software Engineering (ASE), Seoul, South Korea.*
- 2025**      **PROGRAM COMMITTEE MEMBER**  
*IEEE International Conference on Software Maintenance and Evolution (ICSME), Auckland, New Zealand.*
- 2025**      **PROGRAM COMMITTEE MEMBER**  
*ACM Conference on the Foundations of Software Engineering (ESEC/FSE), Trondheim, Norway.*
- 2025**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Software Engineering (ICSE), Ottawa, Canada.*
- 2025**      **PROGRAM COMMITTEE MEMBER**  
*IEEE International Conference on Software Analysis, Engineering, and Reengineering (SANER 2025), Montreal, Canada.*
- 2025**      **PROGRAM COMMITTEE MEMBER**

*International Conference on Mining Software Repositories (MSR 2025), Ottawa, Canada.*

**2025 PROGRAM COMMITTEE MEMBER**

*International Conference on Program Comprehension (ICPC 2025), Ottawa, Canada.*

**2025 PROGRAM COMMITTEE MEMBER**

*The Genetic and Evolutionary Computation Conference (GECCO), Lisbon, Portugal.*

**2025 PROGRAM COMMITTEE MEMBER**

*28<sup>th</sup> European Conference on Artificial Intelligence (ECAI), Bologna, Italy.*

**2024 PROGRAM COMMITTEE MEMBER**

*ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), Singapore.*

**2024 PROGRAM COMMITTEE MEMBER**

*International Conference on Automated Software Engineering (ASE), Sacramento, USA.*

**2024 PROGRAM COMMITTEE MEMBER**

*IEEE International Conference on Software Maintenance and Evolution (ICSME), Flagstaff, Arizona, USA.*

**2024 PROGRAM COMMITTEE MEMBER**

*27<sup>th</sup> European Conference on Artificial Intelligence (ECAI), Santiago De Compostela, Spain.*

**2023 PROGRAM COMMITTEE MEMBER**

*The Genetic and Evolutionary Computation Conference (GECCO), Lisbon, Portugal.*

**2023 PROGRAM COMMITTEE MEMBER**

*ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), Singapore.*

**2023 PROGRAM COMMITTEE MEMBER**

*International Conference on Software Engineering (ICSE), Melbourne, Australia.*

**2021 PROGRAM COMMITTEE MEMBER**

*International Conference on Automated Software Engineering (ASE 2021), Melbourne, Australia*

**2021 PROGRAM COMMITTEE MEMBER**

*International Conference on Software Analysis, Evolution, and Reengineering (SANER 2021), Virtual*

**2020 PROGRAM COMMITTEE MEMBER**

*International Conference on Software Analysis, Evolution, and Reengineering (SANER 2020), London, Canada*

**2020 PROGRAM COMMITTEE MEMBER**

*International Conference on Software Maintenance and Evolution (ICSME 2020), Adelaide, Australia*

**2020 PROGRAM COMMITTEE MEMBER**

*International Conference on Automated Software Engineering (ASE 2020), Melbourne, Australia*

**2020 PROGRAM COMMITTEE MEMBER**

*International Conference on Mining Software Repositories (MSR 2020), Seoul, South Korea*

**2020 PROGRAM COMMITTEE MEMBER**

*International Conference on Program Comprehension (ICPC 2020), Seoul, South Korea*

**2019 PROGRAM COMMITTEE MEMBER**

*International Conference on Software Maintenance and Evolution (ICSME 2019), Cleveland, USA*

**2019**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Program Comprehension (ICPC 2019), Montreal, Canada*

**2019**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Mining Software Repositories (MSR 2019), Montreal, Canada*

**2019**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Mobile Software Engineering and Systems (MobileSoft 2019), Montreal, Canada*

**2019**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Software Analysis, Evolution, and Reengineering (SANER 2019), Hangzhou, China*

**2018**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Program Comprehension (ICPC 2018), Gothenburg, Sweden*

**2018**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Mining Software Repositories (MSR 2018), Gothenburg, Sweden*

**2018**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Software Analysis, Evolution, and Reengineering (SANER 2018), Campobasso, Italy*

**2017**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Software Maintenance and Evolution (ICSME 2017), Shanghai, China*

**2017**      **PROGRAM COMMITTEE MEMBER**  
*International Workshop on Technical Debt Analytics (TDA 2016), Hamilton, New Zealand*

**2017**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Program Comprehension (ICPC 2016), Buenos Aires, Argentina*

**2017**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Software Engineering and Advances (ICSEA 2017), Vienna, Austria*

**2016**      **PROGRAM COMMITTEE MEMBER**  
*International Workshop on Machine Learning Techniques in Software Quality Evaluation, Wroclaw, Polish*

**2016**      **SCIENTIFIC SECRETARIAT**  
*International Summer School on Software Engineering (ISSSE), University of Salerno*

**2016**      **STUDENT VOLUNTEER**  
*International Conference on Software Engineering (ICSE 2016), Austin, USA*

**2015**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Software Engineering and Advances (ICSEA 2016), Rome, Italy*

**2015**      **PROGRAM COMMITTEE MEMBER**  
*Working Conference on Mining Software Repositories – Mining Challenge Track (MSR 2016), Austin, Texas*

**2015**      **PROGRAM COMMITTEE MEMBER**  
*International Conference on Software Engineering and Advances (ICSEA 2015), Barcelona, Spain*

**2015**      **STUDENT VOLUNTEER**  
*International Conference on Software Engineering (ICSE 2015), Florence, Italy*

**2014**      **SCIENTIFIC SECRETARIAT**  
*International Summer School on Software Engineering (ISSSE), University of Salerno.*

## 7.4 JOURNAL SERVICES

2024-current	<b>MEMBER OF THE BOARD OF DISTINGUISHED REVIEWERS – ACM TRANSACTIONS ON SOFTWARE ENGINEERING AND METHODOLOGY (TOSEM)</b> – LINK: <a href="https://dl.acm.org/journal/tosem/distinguished-reviewers-board">HTTPS://DL.ACM.ORG/JOURNAL/TOSEM/DISTINGUISHED-REVIEWERS-BOARD</a>
2022-current	<b>ASSOCIATE EDITOR – ELSEVIER’S INFORMATION AND SOFTWARE TECHNOLOGY (IST)</b> – LINK: <a href="https://www.sciencedirect.com/journal/information-and-software-technology/about/editorial-board">HTTPS://WWW.SCIENCEDIRECT.COM/JOURNAL/INFORMATION-AND-SOFTWARE-TECHNOLOGY/ABOUT/EDITORIAL-BOARD</a>
2022	<b>GUEST EDITOR – ELSEVIER’S JOURNAL OF SYSTEMS AND SOFTWARE (JSS)</b> Special Issue on “Software Evolution, Engineering, and Reengineering in Practice”
2021-current	<b>ASSOCIATE EDITOR – SPRINGER’S JOURNAL OF EMPIRICAL SOFTWARE ENGINEERING (EMSE)</b> – LINK: <a href="https://link.springer.com/journal/10664/editorial-board">HTTPS://LINK.SPRINGER.COM/JOURNAL/10664/EDITORIAL-BOARD</a>
2021	<b>GUEST EDITOR – SPRINGER’S JOURNAL OF EMPIRICAL SOFTWARE ENGINEERING (EMSE)</b> Special Issue on “Program Comprehension” – LINK: <a href="https://emsejournal.github.io/special_issues/2021_Program_Comprehension.html">https://emsejournal.github.io/special_issues/2021_Program_Comprehension.html</a>
2021-current	<b>ASSOCIATE EDITOR – E-INFORMATICA SOFTWARE ENGINEERING JOURNAL (E-INFORMATICA)</b> – LINK: <a href="https://www.e-informatyka.pl/index.php/einformatica/editorial-board/">HTTPS://WWW.E-INFORMATYKA.PL/INDEX.PHP/EINFORMATICA/EDITORIAL-BOARD/</a>
2020-2023	<b>REVIEW BOARD MEMBER – IEEE TRANSACTIONS ON SOFTWARE ENGINEERING (TSE)</b>
2020-2023	<b>ASSOCIATE EDITOR – ELSEVIER’S JOURNAL OF SYSTEMS AND SOFTWARE (JSS)</b>
2019-current	<b>EDITORIAL ASSISTANT – ELSEVIER’S SCIENCE OF COMPUTER PROGRAMMING (SCICO)</b> – LINK: <a href="https://www.sciencedirect.com/journal/science-of-computer-programming/about/editorial-board">HTTPS://WWW.SCIENCEDIRECT.COM/JOURNAL/SCIENCE-OF-COMPUTER-PROGRAMMING/ABOUT/EDITORIAL-BOARD</a>
2019-2022	<b>SOCIAL MEDIA DIRECTOR – ACM TRANSACTIONS ON SOFTWARE ENGINEERING AND METHODOLOGY (TOSEM)</b>
2019-2020	<b>EDITORIAL BOARD MEMBER – ELSEVIER’S JOURNAL OF SYSTEMS AND SOFTWARE (JSS)</b>
2019	<b>GUEST EDITOR – ELSEVIER’S JOURNAL OF SYSTEMS AND SOFTWARE (JSS)</b> Special Issue on “Machine Learning Techniques for Software Quality Evaluation”
2018	<b>GUEST EDITOR – SPRINGER’S JOURNAL OF EMPIRICAL SOFTWARE ENGINEERING (EMSE)</b> Special Issue on “Mobile Software Engineering”
2018	<b>GUEST EDITOR – WILEY’S JOURNAL OF SOFTWARE MAINTENANCE AND EVOLUTION (JSEP)</b> Special Issue on “Machine Learning Techniques for Software Quality Evaluation”
2017-current	<b>REVIEW BOARD MEMBER – SPRINGER’S JOURNAL OF EMPIRICAL SOFTWARE ENGINEERING (EMSE)</b>
2016-current	<b>REFeree ACTIVITIES</b> <i>Referee for:</i> <ul style="list-style-type: none"><li>• TSE: IEEE Transactions on Software Engineering (100+ reviews);</li><li>• TOSEM: ACM Transactions on Software Engineering and Methodology (30+ reviews);</li><li>• EMSE: Springer’s Empirical Software Engineering (100+ reviews);</li><li>• IST: Elsevier’s Information and Software Technology (20+ reviews);</li><li>• JSS: Elsevier’s Journal of Systems and Software (70+ reviews);</li><li>• SCICO: Elsevier’s Science of Computer Programming Journal (30+ reviews).</li></ul>

## 7.5 INVITED SPEAKER

- 2025** F. Palomba.  
Mind the Bias: Fairness by Design in AI-Powered Software Engineering Assistants  
1st Workshop on Evaluation of Qualitative Aspects of Intelligent Software Assistants, Istanbul, Turkey, June 17<sup>th</sup>.
- 2024** F. Palomba.  
Technical Debt in the AI Era: A TechDebt's Offer AI Can't Refuse  
7<sup>th</sup> ACM/IEEE International Conference on Technical Debt (TechDebt 2024), Lisbon, Portugal, April 15<sup>th</sup>.
- 2024** F. Palomba.  
Toward Next-Generation Automated Test Code Quality Analysis  
9th Brazilian Symposium on Systematic and Automated Software Testing (SAST 2024), Curitiba, Paraná, Brazil, September 30<sup>th</sup>.
- 2022** F. Palomba.  
Mining Software Repositories for Vulnerability Prediction: Challenges, Lessons Learned, and Recommendations  
International Summer School on Security Testing and Verification, Leuven, Belgium, September 22<sup>nd</sup>.
- 2022** F. Palomba.  
Technical Debt: The Road Ahead  
Polish Conference on Software Engineering, September 15<sup>th</sup>.
- 2020** F. Palomba.  
Artificial Intelligence, This Unknown.  
Virtual Annual Conference on Geospatial Big Data, December 21<sup>th</sup>.
- 2020** F. Palomba.  
Mutation Testing Meets Software Analytics: A Hands-On Tutorial.  
15<sup>th</sup> International Conference on Mining Software Repositories (MSR 2020) – Education Track, June 30<sup>th</sup>.
- 2019** F. Palomba.  
Test Code Quality: A New Dimension of Test Code Effectiveness.  
10<sup>th</sup> International Workshop on Empirical Software Engineering in Practice (IWESEP), Tokyo University of Technology, December 13<sup>th</sup>.
- 2019** F. Palomba.  
Software Design 101: Improving the Design of Existing Code, Tests, and Communities.  
14<sup>th</sup> International Summer School on Software Engineering, University of Salerno, June 17<sup>th</sup>.
- 2019** F. Palomba.  
Software Design 101: Improving the Design of Existing Code, Tests, and Communities.  
2<sup>nd</sup> International Summer School on Software Engineering, Tampere University of Technology, June 6<sup>th</sup>.
- 2018** F. Palomba.  
Managing Source Code Quality in Mobile Applications.  
4<sup>th</sup> International Summer School on Software Engineering, Free-University of Bolzano, July 10<sup>th</sup>.
- 2018** F. Palomba.  
Exploiting Machine Learning Techniques for the Automatic Identification of Code Smells  
1<sup>st</sup> International Summer School on Machine Learning, Eindhoven University of Technology, July 20<sup>th</sup>
- 2018** F. Palomba.  
Machine Learning for Mobile Applications.  
IFI Summer School on Machine Learning, University of Zurich, June 28<sup>th</sup>.

- 2017** F. Palomba.  
Does Refactoring of Test Smells Induce Fixing Flaky Tests?  
CREST Open Workshop organized by the University College of London, November 27<sup>th</sup>.
- 2017** F. Palomba.  
Not Only Maintainability: Revisiting Test Smells as a Measure of Test Code Effectiveness.  
IPA Fall Days on System and Software Analysis organized by the CWI institute, Nunspeet (The Netherlands), November 8<sup>th</sup>
- 2016** F. Palomba.  
Mining Version Histories for Detecting Code Smells.  
CREST Open Workshop organized by the University College of London, November 29<sup>th</sup>.
- 2015** F. Palomba.  
Using Alternative Sources of Information for Smell Detection.  
Delft University of Technology, October 23<sup>rd</sup>.
- 2014** F. Palomba  
Software Metrics and Antipatterns: Challenges and Solution  
University of Molise, November, 12<sup>nd</sup>.

## 7.6 GUEST LECTURER

- 2024** F. Palomba.  
Software Engineering with and for Artificial Intelligence  
Advanced Ph.D. Course at the Gran Sasso Science Institute, June 24-27
- 2020** F. Palomba.  
On Code and Test Smells  
Software Modeling and Analysis Course at the University of Bern, November 4<sup>th</sup>
- 2017** F. Palomba.  
Code Smells: Relevance of the Problem and Novel Detection Techniques  
Software Maintenance and Evolution Course at the University of Zurich, December 8<sup>th</sup>
- 2017** F. Palomba.  
Mining User Reviews to Support the Evolution of Mobile Applications.  
Green Lab at the University of Amsterdam, October 19<sup>th</sup>
- 2017** F. Palomba.  
Mining User Reviews to Support the Evolution of Mobile Applications.  
Mining Software Repositories Course at the Delft University of Technology, September 26<sup>th</sup>
- 2016** F. Palomba.  
The Back-end Side of Compilers.  
Software Engineering Course at the University of Salerno, June 4<sup>th</sup>
- 2016** F. Palomba.  
Bug Prediction: An Overview.  
Software Engineering Course at the University of Salerno, May 27<sup>th</sup>
- 2016** F. Palomba.  
Code Smell Detection and Refactoring Automation.  
Software Engineering Course at the University of Salerno, May 19<sup>th</sup>



## 7.7 HIRING COMMITTEES

- 2024      HIRING COMMITTEE MEMBER OF A RESEARCH FELLOW AT UNIVERSITY OF SALERNO (ITALY)**  
Designed member of the hiring committee for a position of Research Fellow at the University of Salerno (Italy).
- 2024      HIRING COMMITTEE MEMBER OF A RESEARCH FELLOW AT UNIVERSITY OF SALERNO (ITALY)**  
Designed member of the hiring committee for a position of Research Fellow at the University of Salerno (Italy).
- 2023      HIRING COMMITTEE MEMBER OF A RESEARCH FELLOW AT UNIVERSITY OF SALERNO (ITALY)**  
Designed member of the hiring committee for a position of Research Fellow at the University of Salerno (Italy).
- 2023      HIRING COMMITTEE MEMBER OF A RESEARCH FELLOW AT UNIVERSITY OF SALERNO (ITALY)**  
Designed member of the hiring committee for a position of Research Fellow at the University of Salerno (Italy).
- 2023      HIRING COMMITTEE MEMBER OF A RESEARCH FELLOW AT UNIVERSITY OF SALERNO (ITALY)**  
Designed member of the hiring committee for a position of Research Fellow at the University of Salerno (Italy).
- 2019      HIRING COMMITTEE MEMBER OF AN ASSISTANT PROFESSOR ON BIG DATA SCIENCE**  
Designed member of the hiring committee for a position of Assistant Professor at the University of Zurich (Switzerland). In this committee, I was designed as the delegate of the Senior Research Associates.
- 2019      HIRING COMMITTEE MEMBER OF AN ASSOCIATE PROFESSOR ON ARTIFICIAL INTELLIGENCE AND MACHINE LEARNING**  
Designed member of the hiring committee for a position of Assistant Professor at the University of Zurich (Switzerland). In this committee, I was designed as the delegate of the Senior Research Associates.

## 7.8 RESEARCH GRANT COMMITTEES

- 2023      REVIEWER FOR THE SWISS SPECIAL CALL JAPAN PROGRAM**  
Reviewer of research proposals submitted for collaborative research proposals between Japan and Switzerland.
- 2023      REVIEWER FOR THE DUTCH RESEARCH COUNCIL (NWO) GRANTS PROGRAM**  
Expert Reviewer of research proposals submitted for funding request to the Dutch Research Council.
- 2022      MEMBER OF THE SWISS NATIONAL SCIENCE FOUNDATION (SNSF) GRANTS PROGRAM**  
Member of the selection committee of research proposals submitted to the Mathematical, Physical, and Engineering Sciences Division of the SNSF Grants Program, which aimed at promoting Swiss researchers.
- 2022      MEMBER OF THE NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL OF CANADA (NSERC) DISCOVERY GRANTS PROGRAM**  
Member of the selection committee of research proposals submitted to the Engineering Section of the NSERC Discovery Grants Program, which aimed at promoting the research of young researchers.
- 2021      MEMBER OF THE RESEARCH GRANT COMMITTEE OF THE FREE UNIVERSITY OF BOZEN-BOLZANO**  
Member of the selection committee of research proposals submitted to the Internal Research Grant Program, which aimed at promoting interdisciplinary research of researchers at the Free University of Bozen-Bolzano.
- 2021      MEMBER OF THE NATURAL SCIENCES AND ENGINEERING RESEARCH COUNCIL OF CANADA (NSERC) DISCOVERY GRANTS PROGRAM**  
Member of the selection committee of research proposals submitted to the Engineering Section of the NSERC Discovery Grants Program, which aimed at promoting the research of young researchers.
- 2019      MEMBER OF THE ACADEMY OF FINLAND RESEARCH PROGRAM ON “PROGRAMMABLE WORLD AND ADVANCED SOFTWARE TECHNIQUES”**  
Member of the selection committee of research proposals submitted to the “Programmable World and Advanced Software Technologies” research program, which aimed at promoting new research directions of senior researchers located in Finland or that were planning to move to Finland.
- 2019      MEMBER OF THE CROATIAN SCIENCE FOUNDATION RESEARCH PROGRAM ON “BUSINESS SOFTWARE PROJECTS: CRITICAL FACTORS, MODELLING, AND PERSPECTIVES”**

Member of the selection committee of research proposals submitted to the “Business Software Projects: Critical Factors, Modelling, and Perspectives” research program, which aimed at promoting new research directions of both young and senior researchers located in Croatia.

## 7.9 PH.D. COMMITTEE JURIES

- 2025**      **MEMBER OF THE PH.D. COMMITTEE OF THE PH.D. IN “COMPUTER SCIENCE” (UNIVERSITY OF PORTO, PORTUGAL)**  
External Ph.D. Committee Member of the Ph.D. defense of Dr. Dr. Sara Filipa Couto Fernandes, entitled: “*A Live Environment for Continuous Software Inspection and Refactoring*”. Date: May 5<sup>th</sup>, 2025.
- 2023**      **MEMBER OF THE PH.D. COMMITTEE OF THE PH.D. IN “INFORMATION AND COMMUNICATION TECHNOLOGY” (UNIVERSITY OF L’AQUILA, ITALY)**  
External Ph.D. Committee Member of the Ph.D. defenses of Dr. Roberta Capuano, Dr. Gianluca Filippone, and Dr. Claudio Di Sipio. Date: July 26<sup>th</sup>, 2023.
- 2023**      **MEMBER OF THE PH.D. COMMITTEE OF DR. MICHEL MAES BERMEJO (UNIVERSIDAD REY JUAN CARLOS, SPAIN)**  
External Ph.D. Committee member of the dissertation thesis developed by Dr. Michel Maes Bermejo, entitled: “*Hunting Bugs: A Study of the Change History of Open-Source Projects and Its Application to the Detection of How These Changes Introduce Bugs*”. Date: June 30<sup>th</sup>, 2023.
- 2023**      **MEMBER OF THE PH.D. COMMITTEE OF THE PH.D. IN “TECHNOLOGIES FOR COMPUTER ENGINEERING” (UNIVERSITY OF SANNIO, ITALY)**  
External Ph.D. Committee Member of the Ph.D. defenses of Dr. Anna Vacca and Dr. Martina Iammarino. Date: February 1<sup>st</sup>, 2023.
- 2022**      **INVITED HONORARY MEMBER OF THE PH.D. COMMITTEE OF DR. MOHAMED SOFIEN BOUTAIB (UNIVERSITY OF TUNIS, TUNISIA)**  
Honorary member of the dissertation thesis developed by Dr. Mohamed Sofien Boutaib, entitled: “*Search-Based Code Smell Detection in Imbalanced and Uncertain Environments*”. Date: January 12<sup>nd</sup>, 2022.
- 2021 -**      **MEMBER OF THE ADVISORY COMMITTEE OF DR. SARA FILIPA COUTO FERNANDES (UNIVERSITY OF PORTO, PORTUGAL)**  
**2025**      External assessor and Ph.D. advisory committee member of the dissertation thesis developed by Dr. Sara Filipa Couto Fernandes, entitled: “*A Live Environment for Continuous Software Inspection and Refactoring*”.
- 2020**      **MEMBER OF THE PH.D. JURY OF DR. JONAS DE BLESER (VRJIE UNIVERSITEIT BRUSSEL, BELGIUM)**  
External assessor and Ph.D. committee member of the dissertation thesis developed by Dr. Jonas De Bleser, entitled: “*An Automated Delta-Debugging Approach to Resilience Testing of Actor Systems through Fault Injection*”. Date: October 2<sup>nd</sup>, 2020.

## 7.10 ACADEMIC SERVICES

- 2025 -**      **NATIONAL COORDINATOR OF THE FOCUS GROUP ON “SOFTWARE” OF THE CINI WORKING GROUP ON SYSTEM AND SERVICE QUALITY**  
**current**      National Coordinator of the Focus Group on “Software” of the CINI Working Group, which aims to foster collaboration among academia, industry, and public institutions to advance research, innovation, and technology transfer in the field of software engineering, with a particular focus on emerging challenges such as AI-driven development, cybersecurity, and sustainable software.
- 2023 -**      **MEMBER OF THE PH.D. COMMITTEE OF THE XXXIX CYCLE OF THE PH.D. PROGRAM IN COMPUTER SCIENCE**  
**current**      Member of the Ph.D. Committee of the XXXIX Cycle of the Ph.D. Program in Computer Science of the University of Salerno.
- 2023 -**      **MEMBER OF THE PH.D. PROGRAM QUALITY ASSURANCE GROUP**  
**current**      Member of the Quality Assurance Group with the responsibility of monitoring the research activities and career progresses of the Ph.D. Students enrolled to the Ph.D. Program in Computer Science of the University of Salerno.
- 2022 -**      **LOCAL COORDINATOR OF THE CINI WORKING GROUP ON SYSTEM AND SERVICE QUALITY**

<b>current</b>	Local Coordinator of the CINI Working Group, which aims to foster discussion and collaboration among the Italian research groups working on methodologies and approaches for maintaining and evolving high-quality IT systems and services.
<b>2021 - current</b>	<b>MEMBER OF THE STUDY PLAN COMMITTEE</b> Member of the Study Plan Committee with the responsibility of verifying and providing advice on the study plans submitted by Bachelor's and Master's students enrolled to the Computer Science Program of the University of Salerno.

## 8 CONFERENCES AND SCHOOLS PARTICIPATIONS

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<b>2024</b>	<b>46<sup>TH</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING (ICSE 2024)</b> <i>Lisbon, Portugal</i>
<b>2024</b>	<b>31<sup>ST</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE ANALYSIS, EVOLUTION, AND REENGINEERING (SANER 2018)</b> <i>Rovaniemi, Finland</i>
<b>2023</b>	<b>45<sup>TH</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING (ICSE 2023)</b> <i>Melbourne, Australia</i>
<b>2023</b>	<b>49<sup>TH</sup> EUROMICRO CONFERENCE SERIES ON SOFTWARE ENGINEERING AND ADVANCED APPLICATIONS (SEAA 2023)</b> <i>Durres, Albania</i>
<b>2022</b>	<b>48<sup>TH</sup> EUROMICRO CONFERENCE SERIES ON SOFTWARE ENGINEERING AND ADVANCED APPLICATIONS (SEAA 2022)</b> <i>Gran Canaria, Spain</i>
<b>2021</b>	<b>36<sup>TH</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE MAINTENANCE AND EVOLUTION (ICSME 2021)</b> <i>Virtual</i>
<b>2021</b>	<b>43<sup>RD</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING (ICSE 2021)</b> <i>Virtual</i>
<b>2020</b>	<b>35<sup>TH</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE MAINTENANCE AND EVOLUTION (ICSME 2020)</b> <i>Virtual</i>
<b>2020</b>	<b>42<sup>ND</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING (ICSE 2020)</b> <i>Virtual</i>
<b>2019</b>	<b>41<sup>ST</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING (ICSE 2019)</b> <i>Montreal, Canada</i>
<b>2018</b>	<b>34<sup>TH</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE MAINTENANCE AND EVOLUTION (ICSME 2018)</b> <i>Madrid, Spain</i> Presentation of [C36].
<b>2018</b>	<b>40<sup>TH</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING (ICSE 2018)</b> <i>Gothenburg, Sweden</i> Presentation of [J7], [J8].
<b>2018</b>	<b>25<sup>TH</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE ANALYSIS, EVOLUTION, AND REENGINEERING (SANER 2018)</b> <i>Campobasso, Italy</i>
<b>2017</b>	<b>33<sup>RD</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE MAINTENANCE AND EVOLUTION (ICSME 2017)</b> <i>Shanghai, China</i>

Presentation of [C23].

- 2017**      **39<sup>TH</sup> IEEE/ACM INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING (ICSE 2017)**  
*Buenos Aires, Argentina*  
Presentation of [C16], [C18].
- 2017**      **25<sup>TH</sup> IEEE INTERNATIONAL CONFERENCE ON PROGRAM COMPREHENSION (ICPC 2017)**  
*Buenos Aires, Argentina*  
Presentation of [C21], [C22].
- 2016**      **49<sup>TH</sup> CREST OPEN WORKSHOP (COW) ON SOFTWARE ARCHITECTURE AND TECHNICAL DEBT**  
*London, United Kingdom*  
Presentation of [J1].
- 2016**      **32<sup>ND</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE MAINTENANCE AND EVOLUTION (ICSME 2016)**  
*Raleigh, USA*  
Presentation of [C13], [C15].
- 2016**      **38<sup>TH</sup> IEEE/ACM INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING (ICSE 2016)**  
*Austin, USA*  
Presentation of [C9], [C10].
- 2015**      **1<sup>ST</sup> INTERNATIONAL SUMMER SCHOOL ON SOFTWARE ENGINEERING (ISSSE)**  
*Free University of Bozen-Bolzano, Bolzano, Italy*  
Presentation of [C1].
- 2015**      **37<sup>TH</sup> IEEE/ACM INTERNATIONAL CONFERENCE ON SOFTWARE ENGINEERING (ICSE 2015)**  
*Florence, Italy*  
Presentation of [C4], [C5] and [C6].
- 2014**      **30<sup>TH</sup> IEEE INTERNATIONAL CONFERENCE ON SOFTWARE MAINTENANCE AND EVOLUTION (ICSME 2014)**  
*Victoria, British Columbia, Canada*  
Presentation of [C3].
- 2014**      **11<sup>TH</sup> INTERNATIONAL SUMMER SCHOOL ON SOFTWARE ENGINEERING (ISSSE)**  
*University of Salerno, Fisciano, Italy*  
Scientific Secretarial of the School
- 2013**      **28<sup>TH</sup> IEEE/ACM INTERNATIONAL CONFERENCE ON AUTOMATED SOFTWARE ENGINEERING (ASE 2013)**  
*Palo Alto, USA*  
Presentation of [C2].

## 9 RESEARCH INTERNSHIPS AND VISITING

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- 2024**      **VISITING PROFESSOR AT THE GRAN SASSO SCIENCE INSTITUTE, L'AQUILA, ITALY**  
7 days as Visitor Professor at the Gran Sasso Science Institute (GSSI). During the visiting period, I delivered an advanced Ph.D. course entitled "Software Engineering with and for Artificial Intelligence".
- 2021**      **VISITING PROFESSOR AT THE JHERONIMUS ACADEMY OF DATA SCIENCE, S'HERTOGENBOSCH, THE NETHERLAND**  
6 months as Visitor Professor at the Jheronimus Academy of Data & Engineering (JADE) Lab. The research conducted in this period resulted in the definition of novel methods and techniques for the application of machine learning and natural language processing to various software engineering domains, like code quality of infrastructure code as well as the analysis of functional and non-functional requirements of mobile applications.

- 2016 VISITING PHD STUDENT AT THE DELFT UNIVERSITY OF TECHNOLOGY, DELFT, THE NETHERLAND**  
3 months as Visitor Student. The research conducted in this time period resulted in the definition of TACO, a code smell detection approach exploiting textual-based information, and its empirical evaluation [C11, J8].

## 10 AWARDS AND RECOGNITION

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### 10.1 RESEARCH CAREER AWARDS

- 2023 IEEE COMPUTER SOCIETY TECHNICAL COUNCIL ON SOFTWARE ENGINEERING RISING STAR AWARD**  
Motivation: *"In recognition of his research on code refactoring and code smells. The use of alternative sources of information, such as historical and textual information, besides the structural information previously used in the literature, has led to significant research advancements in the area"*. <https://tc.computer.org/tcse/awards/>.
- 2017 IEEE COMPUTER SOCIETY BEST PHD THESIS AWARD – ITALY SECTION CHAPTER**  
For my PhD Thesis named: "Code Smells: Relevance of the Problem and Novel Detection Techniques".  
<https://site.ieee.org/italy-cs/ieee-computer-society-italy-section-chapter-2017-phd-thesis-award/>

### 10.2 DISTINGUISHED/BEST PAPER AWARDS

- 2025 BEST PAPER AWARD FOR [C87]**  
*1st International Workshop on Fairness in Software Systems (Fairness 2025), Montreal, Canada.*
- 2023 BEST PAPER AWARD FOR [C75]**  
*49th Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Durres, Albania.*
- 2022 BEST PAPER AWARD FOR [C70]**  
*48th Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Gran Canaria, Spain.*
- 2022 IEEE/TCSE DISTINGUISHED PAPER AWARD FOR [C64]**  
*29th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER), Honolulu, Hawaii, USA.*
- 2018 PAPER HONOURABLE MENTION FOR [C40]**  
*21th ACM International Conference on Computer Supported Cooperative Work (CSCW), New York, USA.*
- 2018 BEST TOOL DEMO AWARD FOR [C29]**  
*33rd IEEE International Conference on Software Maintenance and Evolution (ICSME), Shanghai, China.*
- 2015 ACM/SIGSOFT DISTINGUISHED PAPER AWARD FOR [C4]**  
*37th ACM/IEEE International Conference of Software Engineering (ICSE), Firenze, Italy.*
- 2015 BRONZE MEDAL AT THE STUDENT RESEARCH COMPETITION FOR [C5]**  
*37th ACM/IEEE International Conference of Software Engineering (ICSE), Firenze, Italy.*
- 2013 ACM/SIGSOFT DISTINGUISHED PAPER AWARD FOR [C2]**  
*28th ACM/IEEE International Conference on Automated Software Engineering (ASE), Palo Alto, USA.*

### 10.3 DISTINGUISHED/OUTSTANDING REVIEWER AWARDS

2025	<b>DISTINGUISHED REVIEWER AWARD</b> <i>35<sup>th</sup> International Conference on the Foundations of Software Engineering (FSE 2025), Trondheim, Norway.</i>
2025	<b>DISTINGUISHED REVIEWER AWARD</b> <i>22<sup>nd</sup> International Conference on Mining Software Repositories (MSR 2025), Ottawa, Canada.</i>
2025	<b>DISTINGUISHED REVIEWER AWARD</b> <i>2<sup>nd</sup> ACM International Conference on AI Foundation Models and Software Engineering (FORGE 2025), Ottawa, Canada.</i>
2024	<b>DISTINGUISHED REVIEWER AWARD</b> <i>40<sup>th</sup> ACM International Conference on Software Maintenance and Evolution, Flagstaff, Arizona, USA.</i>
2024	<b>DISTINGUISHED REVIEWER AWARD</b> <i>1<sup>st</sup> ACM International Conference on AI-Powered Software (Alware), Porto de Galinhas, Brazil.</i>
2023	<b>DISTINGUISHED REVIEWER AWARD</b> <i>IEEE Transactions on Software Engineering (TSE).</i>
2021	<b>DISTINGUISHED PROGRAM COMMITTEE MEMBER AWARD</b> <i>36<sup>th</sup> IEEE/ACM International Conference on Automated Software Engineering (ASE).</i>
2021	<b>DISTINGUISHED REVIEWER AWARD</b> <i>21<sup>st</sup> IEEE International Conference on Source Code Analysis and Manipulation (SCAM).</i>
2020	<b>OUTSTANDING REVIEWER AWARD</b> <i>Elsevier's Information and Software Technology Journal (IST).</i>
2020	<b>OUTSTANDING REVIEWER AWARD</b> <i>e-Informatica Software Engineering Journal (EISEJ).</i>
2020	<b>OUTSTANDING REVIEWER AWARD</b> <i>Elsevier's Journal of Systems and Software (JSS).</i>
2019	<b>DISTINGUISHED REVIEWER AWARD</b> <i>27<sup>th</sup> IEEE/ACM International Conference on Program Comprehension (ICPC).</i>
2019	<b>OUTSTANDING REVIEWER AWARD</b> <i>Elsevier's Journal of Systems and Software (JSS).</i>
2018	<b>DISTINGUISHED REVIEWER AWARD</b> <i>Springer's Journal of Empirical Software Engineering (EMSE).</i>
2018	<b>OUTSTANDING REVIEWER AWARD</b> <i>Elsevier's Journal of Systems and Software (JSS).</i>
2018	<b>OUTSTANDING REVIEWER AWARD</b> <i>Elsevier's Information and Software Technology Journal (IST).</i>
2017	<b>DISTINGUISHED REVIEWER AWARD</b> <i>Springer's Journal of Empirical Software Engineering (EMSE).</i>
2016	<b>OUTSTANDING REVIEWER AWARD</b> <i>Elsevier's Information and Software Technology Journal (IST).</i>

## 11 GRANTS

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- 2023 PRIN (PROGETTO DI RILEVANTE INTERESSE NAZIONALE) PROJECT— AMOUNT: 239.660 EUR**  
The grant has the awarded by the Ministry of University (MUR) and represents one of the most prestigious research grants for researchers in Italy. The project aims at devising novel methods and techniques for engineering fairness and ethics in the context of Artificial Intelligence-based software systems. The role played in this project is the one of *National Coordinator* of the project. The project is in collaboration with the University of L'Aquila (Prof. Davide Di Ruscio) and the University of Sannio (Dr. Andrea Di Sorbo).
- 2023 PRIN (PROGETTO DI RILEVANTE INTERESSE NAZIONALE) PROJECT— AMOUNT: 249.609 EUR**  
The grant has the awarded by the Ministry of University (MUR) and represents one of the most prestigious research grants for researchers in Italy. The project aims at devising novel methods and techniques for the quality and evolution of Artificial Intelligence-based software systems. The role played in this project is the one of *Local Scientific Coordinator* of the research unit of the University of Salerno. The project is in collaboration with the University of Bari (Prof. Nicole Novielli) and the University of Molise (Prof. Rocco Oliveto). Prof. Nicole Novielli from the University of Bari is the National Coordinator of the project.
- 2019 SNSF AMBIZIONE— AMOUNT: 894.430 CHF**  
The grant has the awarded by the Swiss National Science Foundation and represents one of the most prestigious individual research grants for young researchers in Europe. The project aims at devising novel instruments and techniques to improve automatic software testing.
- 2019 HASLER RESEARCH GRANT — AMOUNT: 50.000 CHF**  
The grant has the main goal to study the feasibility of new test code quality metrics based on a combination of factors deemed important by developers.
- 2018 FORSCHUNGSCREDIT POSTDOC GRANT — AMOUNT: 60.000 CHF**  
The grant has the main goal to study how test code quality can be exploited to improve test code effectiveness, with the aim of producing novel techniques and tools to help developers in designing effective test cases.
- 2017 4TU.NIRICT.2017 — AMOUNT: 70.000 €**  
The grant has the main goal to reinforce the collaboration among the four technical Universities in Netherlands. The proposal is related to the relationship between social and technical aspects of source code, and mainly concerned with the understanding of the impact of social debt on the introduction of code smells and fault.

## 12 LIST OF PAPERS

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**Note:** This list is not a complete list of the papers I published in my career, but only the most significant ones. A complete list is available at: <https://dblp.org/pid/116/6732.html>.

### 12.1 INTERNATIONAL JOURNALS

- [J82] G. Recupito, G. Giordano, F. Ferrucci, D. Di Nucci, **F. Palomba**.  
When Code Smells Meet ML: On the Lifecycle of ML-specific Code Smells in ML-enabled Systems.  
Springer's Journal of Empirical Software Engineering (EMSE), to appear, 2025.
- [J81] V. De Martino, G. Recupito, G. Giordano, F. Ferrucci, D. Di Nucci, **F. Palomba**.  
Into the ML-Universe: An Improved Classification and Characterization of Machine-Learning Projects.  
Elsevier's Journal of Systems and Software (JSS), to appear, 2025.
- [J80] P. Khokhar, C. Gravino, **F. Palomba**.  
Advances in Artificial Intelligence for Diabetes Prediction: Insights from a Systematic Literature Review.  
Elsevier's Artificial Intelligence in Medicine (AIIM), Vol. 164, 103132, 2025.

- [J79] V. De Martino, G. Voria, C. Troiano, G. Catolino, **F. Palomba**.  
Examining the Impact of Bias Mitigation Algorithms on the Sustainability of ML-enabled Systems: A Benchmark Study.  
Elsevier's Journal of Systems and Software (JSS), to appear, 2025.
- [J78] G. De Vito, **F. Palomba**, F. Ferrucci.  
The Role of Large Language Models in Addressing IoT Challenges: A Systematic Literature Review.  
Future Generation Computer Systems (FGCS), Vol. 171, 107829, 2025.
- [J77] G. De Vito, S. Di Martino, F. Ferrucci, C. Gravino, **F. Palomba**.  
LLM-Based Automation of Cosmic Functional Size Measurement From Use Cases.  
IEEE Transactions on Software Engineering (TSE), to appear, 2025.
- [J76] S. Lambiase, G. Catolino, **F. Palomba**, F. Ferrucci, D. Russo.  
Investigating the role of cultural values in adopting large language models for software engineering.  
ACM Transactions on Software Engineering and Methodology (TOSEM), to appear, 2025.
- [J75] G. Voria, G. Sellitto, C. Ferrara, F. Abate, A. De Lucia, F. Ferrucci, G. Catolino, **F. Palomba**.  
Fairness-aware practices from developers' perspective: A survey.  
Elsevier's Information and Software Technology (IST), Vol. 182, 107710, 2025.
- [J74] V. Pontillo, L. Martins, I. Machado, **F. Palomba**, F. Ferrucci.  
An empirical investigation into the capabilities of anomaly detection approaches for test smell detection.  
Elsevier's Journal of Systems and Software (JSS), vol. 222, 112320, 2025.
- [J73] V. De Martino, **F. Palomba**.  
Classification and challenges of non-functional requirements in ML-enabled systems: A systematic literature review.  
Elsevier's Information and Software Technology (IST), Vol. 181, 107678, 2025.
- [J72] G. Annunziata, S. Lambiase, D. Tamburri, W. J. Van den Heuven, **F. Palomba**, G. Catolino, F. Ferrucci, A. De Lucia.  
Uncovering Community Smells in Machine Learning-Enabled Systems: Causes, Effects, and Mitigation Strategies.  
ACM Transactions on Software Engineering and Methodology, to appear.
- [J71] L. Martins, V. Pontillo, H. Costa, F. Ferrucci, **F. Palomba**, I. Machado.  
Test code refactoring unveiled: where and how does it affect test code quality and effectiveness?  
Springer's Journal of Empirical Software Engineering (EMSE), Vol. 30(1), 1-39, 2025.
- [J70] S. Lambiase, G. Catolino, **F. Palomba**, F. Ferrucci.  
Motivations, Challenges, Best Practices, and Benefits for Bots and Conversational Agents in Software Engineering: A Multivocal Literature Review.  
ACM Computing Surveys (CSUR), vol. 57, n. 4, pp. 1-37.
- [J69] A. Afeltra, A. Cannavale, F. Pecorelli, V. Pontillo, **F. Palomba**.  
A Large-Scale Empirical Investigation into Cross-Project Flaky Test Prediction.  
IEEE Access, vol. 12, pp. 131255-131265, 2024.
- [J68] M. De Stefano, F. Pecorelli, D. Di Nucci, **F. Palomba**, A. De Lucia.  
The Quantum Frontiers of Software Engineering: A Systematic Mapping Study.  
Elsevier's Information and Software Technology (IST), vol. 175, 107525.
- [J67] G. Recupito, F. Pecorelli, G. Catolino, V. Lenarduzzi, D. Taibi, D. Di Nucci, **F. Palomba**.  
Technical Debt in AI-Enabled Systems: On the Prevalence, Severity, Impact, and Management Strategies for Code and Architecture.  
Elsevier's Journal of Systems and Software (JSS), vol. 216, 112151, 2024.
- [J66] V. Pentangelo, D. Di Dario, S. Lambiase, F. Ferrucci, C. Gravino, **F. Palomba**.  
SENEM: A Software Engineering-Enabled Educational Metaverse.



Elsevier's Information and Software Technology (IST), Vol. 174, 107512, 2024.

- [J65] S. Alawadi, K. Alkharabsheh, F. Alkhabbas, V. Kebande, F. Awaysheh, **F. Palomba**, M. Awad.  
FedCSD: A Federated Learning-Based Approach for Code Smell Detection.  
IEEE Access, vol. 12, pp. 44888 - 44904 2024.
- [J64] E. Iannone, G. Sellitto, E. Iaccarino, F. Ferrucci, A. De Lucia, **F. Palomba**.  
Early and Realistic Exploitability Prediction of Just-Disclosed Software Vulnerabilities: How Reliable Can It Be?  
ACM Transactions on Software Engineering and Methodology (TOSEM), vol. 33, issue 6, pp. 1-41, 2024.
- [J63] M. De Stefano, D. Di Nucci, **F. Palomba**, A. De Lucia.  
An Empirical Study Into the Effects of Transpilation on Quantum Circuit Smells.  
Springer's Journal of Empirical Software Engineering (EMSE), Vol. 29.3, 61, 2024.
- [J62] F. Pecorelli, G. Grano, **F. Palomba**, H. Gall, A. De Lucia.  
Toward Granular Search-Based Automatic Unit Test Generation.  
Springer's Journal of Empirical Software Engineering (EMSE), vol.29, n. 71, 2024.
- [J61] V. Pontillo, **F. Palomba**, F. Ferrucci.  
Test Code Flakiness in Mobile Apps: The Developer's Perspective.  
Elsevier's Information and Software Technology (IST), Vol. 168, 107394, 2024.
- [J60] V. Pontillo, D. Amoroso D'Aragona, F. Pecorelli, D. Di Nucci, F. Ferrucci, **F. Palomba**.  
Machine Learning-Based Test Smell Detection.  
Springer's Journal of Empirical Software Engineering (EMSE), Vol. 29.2, 1:44, 2024.
- [J59] G. Giordano, G. Festa, G. Catolino, **F. Palomba**, F. Ferrucci, C. Gravino.  
On the Adoption and Effects of Source Code Reuse on Defect Proneness and Maintenance Effort.  
Springer's Journal of Empirical Software Engineering (EMSE), Vol. 29, 1:20, 2024.
- [J58] S. Lambiase, G. Catolino, F. Pecorelli, D. Tamburri, **F. Palomba**, W.J. van den Heuvel, F. Ferrucci.  
An Empirical Investigation Into the Influence of Software Communities' Cultural and Geographical Dispersion on Productivity.  
Elsevier's Journal of Systems and Software (JSS), Vol. 208, 111878, 2024.
- [J57] C. Ferrara, G. Sellitto, F. Ferrucci, **F. Palomba**, A. De Lucia.  
Fairness-Aware Machine Learning Engineering: How Far Are We?  
Springer's Journal of Empirical Software Engineering (EMSE), vol. 29, n. 9, 2024.
- [J56] M. Zakeri-Nasrabadi, S. Parsa, E. Esmaili, **F. Palomba**.  
A Systematic Literature Review on Code Smells Datasets and Validation Mechanisms.  
ACM Computing Surveys (CSUR), vol. 55, issue 13, n. 298, pp. 1-48, 2023.
- [J55] F. Amato, M. Cicalese, L. Contrasto, G. Cubiciotti, G. D'Ambola, A. La Marca, G. Pagano, F. Tomeo, G. Robertazzi, G. Vassallo, G. Acampora, G. Catolino, G. Giordano, S. Lambiase, V. Pontillo, G. Sellitto, F. Ferrucci, **F. Palomba**.  
QuantuMoonLight: A Low-Code Platform To Experiment With Quantum Machine Learning.  
Elsevier's SoftwareX, vol. 22, 101399, 2023.
- [J54] X. Li, S. Moreschini, Z. Zhang, **F. Palomba**, D. Taibi.  
The Anatomy of a Vulnerability Database: A Systematic Mapping Study.  
Elsevier's Journal of Systems and Software (JSS), Vol. 201, 111679, 2023.
- [J53] E. Iannone, Z. Codabux, V. Lenarduzzi, A. De Lucia, **F. Palomba**.  
Rubbing Salt in the Wound? A Large-Scale Investigation Into the Effects of Refactoring on Security.  
Springer's Journal of Empirical Software Engineering (EMSE), vol. 28, n. 89, 2023.
- [J52] S. Dalla Palma, C. van Asseldonk, G. Catolino, D. Di Nucci, **F. Palomba**, D. Tamburri.

Through the looking-glass: An Empirical Study on Blob Infrastructure Blueprints in TOSCA.  
Wiley's Journal Software Evolution and Process (JSEP), in press, 2022.

- [J51] V. Lenarduzzi, F. Pecorelli, N. Saarimaki, S. Lujan, **F. Palomba**.  
A Critical Comparison on Six Static Analysis Tools: Detection, Agreement, and Precision.  
Elsevier's Journal of Systems and Software (JSS), Vol. 128, 111575, 2022.
- [J50] V. Pontillo, **F. Palomba**, F. Ferrucci.  
Static Test Flakiness Prediction: How Far Can We Go?  
Springer's Journal of Empirical Software Engineering (EMSE), vol. 27, n. 187, 2022.
- [J49] G. Giordano, **F. Palomba**, F. Ferrucci.  
On the Use of Artificial Intelligence to Deal with Privacy in IoT Systems: A Systematic Literature Review.  
Elsevier's Journal of Systems and Software (JSS), vol. 193, 111475, 2022.
- [J48] N. Borovits, I. Kumara, D. Di Nucci, P. Krishnan, S. Dalla Palma, **F. Palomba**, D. Tamburri, W.J. van den Heuvel.  
FindICI: Using Machine Learning to Detect Linguistic Inconsistencies between Code and Natural Language Descriptions in Infrastructure-as-Code.  
Springer's Journal of Empirical Software Engineering (EMSE), vol. 27, n. 178, 2022.
- [J47] M. Di Gregorio, D. Di Nucci, **F. Palomba**, G. Vitiello.  
The Making of Accessible Android Applications: An Empirical Study on the State of the Practice.  
Springer's Journal of Empirical Software Engineering (EMSE), vol. 27, n. 145, 2022.
- [J46] A. Andreou, G. Cascavilla, G. Catolino, **F. Palomba**, D. Tamburri, W.J. van Den Heuvel.  
Unsupervised Labor Intelligence Systems: A Detection Approach and Its Evaluation.  
Springer's Communications in Computer and Information Science (CCIS), to appear.
- [J45] M. De Stefano, F. Pecorelli, D. Di Nucci, **F. Palomba**, A. De Lucia.  
Software Engineering for Quantum Programming: How Far Are We?  
Elsevier's Journal of Systems and Software (JSS), Vol. 190, pp. 111326, 2022.
- [J44] S. Boutaib, M. Elarbi, S. Bechikh, **F. Palomba**, L. Ben Said.  
Handling Uncertainty in SBSE: A Possibilistic Evolutionary Approach for Code Smells Detection.  
Springer's Journal of Empirical Software Engineering (EMSE), vol. 27, n. 124, 2022.
- [J43] F. Lomio, E. Iannone, A. De Lucia, **F. Palomba**, V. Lenarduzzi.  
Just-in-Time Software Vulnerability Prediction: Are We There Yet?  
Elsevier's Journal of Systems and Software (JSS), Vol. 188, pp. 111283, 2022.
- [J42] F. Pecorelli, S. Lujan, V. Lenarduzzi, **F. Palomba**, A. De Lucia.  
On the Adequacy of Static Analysis Warnings with respect to Code Smell Prediction.  
Springer's Journal of Empirical Software Engineering (EMSE), vol. 27, n. 64, 2022.
- [J41] E. Iannone, R. Guadagni, F. Ferrucci, A. De Lucia, **F. Palomba**.  
The Secret Life of Software Vulnerabilities: A Large-Scale Empirical Study.  
IEEE Transactions on Software Engineering (TSE), vol. 49, issue 1, pp. 44-63, 2022.
- [J40] D. Tamburri, **F. Palomba**.  
Evolving Software Forges: An Experience Report from Apache Allura.  
Wiley's Journal Software Evolution and Process (JSEP), vol. 33, n. 12, e2397, 2021.
- [J39] F. Pecorelli, G. Catolino, F. Ferrucci, A. De Lucia, **F. Palomba**.  
Software Testing and Android Applications: A Large-Scale Empirical Study.  
Springer's Journal of Empirical Software Engineering (EMSE), vol. 27, n. 31, 2021.
- [J38] I. Saidani, A. Ouni, M. Mkaouer, **F. Palomba**.

On the Impact of Continuous Integration on Refactoring Practice: An Exploratory Study on TravisTorrent.  
Elsevier's Information and Software Technology (IST), vol. 138, 106618, 2021.

- [J37] I. Kumara, M. Garriga, A. Romeu, D. Di Nucci, **F. Palomba**, D. Tamburri, W. J. van den Heuvel.  
The Do's and Don'ts of Infrastructure Code: A Systematic Grey Literature Review.  
Elsevier's Information and Software Technology (IST), vol. 137, 106593, 2021.
- [J36] F. Dalla Palma, D. Di Nucci, **F. Palomba**, D. Tamburri.  
Within-Project Defect Prediction of Infrastructure-as-Code using Product and Process Metrics.  
IEEE Transactions on Software Engineering (TSE), vol. 48, issue 6, pp. 2086 - 2104, 2021.
- [J35] F. Pecorelli, **F. Palomba**, A. De Lucia.  
The Relation of Test-Related Factors to Software Quality: A Case Study on Apache Systems.  
Springer's Journal of Empirical Software Engineering (EMSE), Vol. 26, Issue 18, pp. 1-42, 2021.
- [J34] D. A. Tamburri, **F. Palomba**, R. Kazman.  
Success and Failure in Software Engineering: A Followup Systematic Literature Review.  
IEEE Transactions on Engineering Management (TEM), Vol. 68, N. 2, pp. 599-611, 2021.
- [J33] G. Grano, **F. Palomba**, H. Gall.  
Lightweight Assessment of Test Case Effectiveness using Source Code Quality Indicators.  
IEEE Transactions on Software Engineering (TSE), Vol. 47, issue 4, pp. 758 - 774, 2021.
- [J32] D. A. Tamburri, **F. Palomba**, R. Kazman.  
Exploring Community Smells in Open-Source: An Automated Approach.  
IEEE Transactions on Software Engineering (TSE), Vol. 47, N. 3, pp. 630-652, 2021.
- [J31] **F. Palomba**, D. A. Tamburri, A. Serebrenik, A. Zaidman, R. Oliveto, F. Arcelli Fontana.  
Beyond Technical Aspects: How Do Community Smells Influence the Maintainability of Code Smells?  
IEEE Transactions on Software Engineering (TSE), Vol. 47, N. 1, pp. 108-129, 2021.
- [J30] **F. Palomba**, D. Tamburri.  
Predicting the Emergence of Community Smells using Socio-Technical Metrics: A Machine Learning Approach.  
Elsevier's Journal of Systems and Software (JSS), Vol. 171, pp. 110847, 2020.
- [J29] S. Boutaib, S. Bechikha, **F. Palomba**, M. Elarbia, L.B. Saida.  
Code Smell Detection and Identification in Imbalanced Environments.  
Elsevier's Expert Systems with Applications (ESWA), Vol. 166, pp. 114076, 2020.
- [J28] S. Dalla Palma, D. Di Nucci, **F. Palomba**, D. Tamburri.  
Towards a Catalogue of Software Quality Metrics for Infrastructure Code.  
Elsevier's Journal of Systems and Software (JSS), Vol. 170, pp. 110726, 2020.
- [J27] D. Tamburri, K. Blincoe, **F. Palomba**, R. Kazman.  
"The Canary in the Coal Mine...": A Cautionary Tale from the Decline of SourceForge.  
Wiley's Software Practice and Experience (SPE), Vol. 50, Issue 10, pp. 1930-1951, 2020.
- [J26] L. Pascarella, **F. Palomba**, A. Bacchelli.  
On the Performance of Method-Level Defect Prediction: A Negative Result.  
Elsevier's Journal of Systems and Software (JSS), Vol. 161, pp. 110493, 2020.
- [J25] G. Catolino, **F. Palomba**, D. Tamburri, A. Serebrenik, F. Ferrucci.  
Gender Diversity and Community Smells: Insights from the Trenches.  
IEEE Software, Vol. 37, Issue 1, pp. 10-16, 2020.
- [J24] G. Grano, **F. Palomba**, D. Di Nucci, A. De Lucia, H. Gall.  
Scented since the Beginning: On the Diffuseness of Test Smells in Automatically Generated Test Code.

- Elsevier's Journal of Systems and Software (JSS), Vol. 156, pp. 312-327, 2019.
- [J23] C. Vassallo, S. Panichella, **F. Palomba**, S. Proksch, H. Gall, A. Zaidman.  
How Developers Engage with Static Analysis Tools in Different Contexts.  
Springer's Journal of Empirical Software Engineering (EMSE), Vol. 25, Issue 2, pp. 1419-1457, 2019.
- [J22] P. Salza, **F. Palomba**, D. Di Nucci, A. De Lucia, F. Ferrucci.  
Third-Party Libraries in Mobile Apps: When, How, and Why Developers Update Them.  
Springer's Journal of Empirical Software Engineering (EMSE), Vol. 25, Issue 3, pp. 2341-2377, 2019.
- [J21] C. Vassallo, G. Grano, **F. Palomba**, H. Gall, A. Bacchelli.  
A Large-Scale Empirical Exploration on Refactoring Activities in Open Source Software Projects.  
Elsevier's Science of Computer Programming (SCP), Vol. 180, pp. 1-15, 2019.
- [J20] G. Catolino, **F. Palomba**, F. Arcelli Fontana, A. Zaidman, A. De Lucia, F. Ferrucci.  
Improving Change Prediction Models with Code Smell-Related Information.  
Springer's Journal of Empirical Software Engineering (EMSE), Vol. 25, Issue 1, pp. 49-95, 2019.
- [J19] G. Catolino, **F. Palomba**, A. Zaidman, F. Ferrucci.  
Not All Bugs are the Same: Understanding, Characterizing, and Classifying the Root Cause of Bugs.  
Elsevier's Journal of Systems and Software (JSS), Vol. 152, pp. 165-181, 2019.
- [J18] **F. Palomba**, A. Zaidman.  
The Smell of Fear: On The Relation Between Test Smells and Flaky Tests.  
Springer's Journal of Empirical Software Engineering (EMSE), Vol. 24, pp. 2907-2946, 2019.
- [J17] M. Ilyas Azeem, **F. Palomba**, L. Shi, Q. Wang.  
Machine Learning Techniques for Code Smell Detection: A Systematic Literature Review and Meta-Analysis.  
Elsevier's Information and Software Technology (IST), Vol. 108, pp. 115-138, 2019.
- [J16] L. Pascarella, **F. Palomba**, A. Bacchelli.  
Fine-Grained Just-In-Time Defect Prediction.  
Elsevier's Journal of Systems and Software (JSS), Vol. 150, pp. 22-36, 2019.
- [J15] E. Fregnan, T. Baum, **F. Palomba**, A. Bacchelli.  
A Survey on Software Coupling Relations and Tools.  
Elsevier's Information and Software Technology (IST), Vol. 107, pp. 159-178, 2019.
- [J14] D. A. Tamburri, **F. Palomba**, A. Zaidman, A. Serebrenik.  
Discovering Community Types in Open Source: A Systematic Approach and Its Evaluation.  
Springer's Journal of Empirical Software Engineering (EMSE), Vol. 24, pp. 1369-1417, 2019.
- [J13] **F. Palomba**, D. Di Nucci, A. Panichella, A. Zaidman, A. De Lucia.  
On the Impact of Code Smells on the Energy Consumption of Mobile Apps  
Elsevier's Information and Software Technology (IST), Vol. 105, pp. 43-55, 2019.
- [J12] **F. Palomba**, M. Zanoni, F. Arcelli Fontana, A. De Lucia, R. Oliveto.  
Toward a Smell-aware Bug Prediction Model  
IEEE Transactions on Software Engineering (TSE), Vol. 45, N. 2, pp. 194-218, 2018.
- [J11] **F. Palomba**, G. Bavota, R. Oliveto, F. Fasano, M. Di Penta, A. De Lucia.  
A Large-scale Empirical Study on the Lifecycle of Code Smell Co-Occurrences  
Elsevier's Information and Software Technology (IST), Vol. 99, pp. 1-10, 2018.
- [J10] G. Catolino, **F. Palomba**, A. De Lucia, F. Ferrucci, A. Zaidman.  
Enhancing Change Prediction Models using Developer-Related Factors.  
Elsevier's Journal of Systems and Software (JSS), Vol. 143, pp. 14-28, 2018.

- [J9] **F. Palomba**, M. Linares Vasquez, G. Bavota, R. Oliveto, M. Di Penta, D. Shybyanyk, A. De Lucia.  
Crowdsourcing User Reviews to Support The Evolution of Mobile Apps.  
Elsevier's Journal of Systems and Software (JSS), Vol. 137, pp. 143-162, 2018.
- [J8] **F. Palomba**, A. Panichella, A. Zaidman, R. Oliveto, A. De Lucia.  
The Scent of a Smell: An Extensive Comparison Between Structural and Textual Code Smells  
IEEE Transactions on Software Engineering (TSE), Vol. 44, N. 10, pp. 977-1000, 2018.
- [J7] **F. Palomba**, G. Bavota, R. Oliveto, F. Fasano, M. Di Penta, A. De Lucia.  
On The Diffuseness and the Impact on Maintainability of Code Smells: A Large Scale Empirical Investigation.  
Springer's Journal of Empirical Software Engineering (EMSE), Vol. 23, N. 3, pp. 1188-1221, 2018.
- [J6] D. Di Nucci, **F. Palomba**, G. De Rosa, G. Bavota, R. Oliveto, A. De Lucia.  
A Developer Centered Bug Prediction Model.  
IEEE Transactions on Software Engineering (TSE), Vol. 44, N. 1, pp. 5-24, 2018.
- [J5] D. Di Nucci, **F. Palomba**, R. Oliveto, A. De Lucia.  
Dynamic Selection of Classifiers to Use in Bug Prediction: An Adaptive Model.  
IEEE Transactions on Emerging Topics in Computational Intelligence (TETCI), Vol. 1, N. 3, pp. 202-212, 2017.
- [J4] M. Tufano, **F. Palomba**, G. Bavota, R. Oliveto, M. Di Penta, A. De Lucia, D. Shybyanyk.  
When and Why Your Code Starts to Smell Bad (and Whether the Smells go Away).  
IEEE Transactions on Software Engineering (TSE), Vol. 43, N. 11, pp. 1063-1088, 2017.
- [J3] M. Tufano, **F. Palomba**, G. Bavota, R. Oliveto, M. Di Penta, A. De Lucia, D. Shybyanyk.  
There and Back Again: Can You Compile That Snapshot?  
Wiley's Journal on Software Maintenance: Evolution and Process (JSEP), Vol. 29, N. 4, pp. 1-20, 2017.
- [J2] G. Bavota, A. De Lucia, M. Di Penta, R. Oliveto, **F. Palomba**.  
An Experimental Investigation on the Innate Relationship between Quality and Refactoring.  
Elsevier's Journal of Systems and Software (JSS), Vol. 107, pp. 1-14, 2015.
- [J1] **F. Palomba**, G. Bavota, M. Di Penta, R. Oliveto, D. Shybyanyk, A. De Lucia.  
Mining Version Histories for Detecting Code Smells.  
IEEE Transactions on Software Engineering (TSE), Vol. 41, N. 5, pp. 462-489, 2015.

## 12.2 INTERNATIONAL CONFERENCES

- [C92] A. Della Porta, S. Lambiase, **F. Palomba**.  
Do Prompt Patterns Affect Code Quality? A First Empirical Assessment of ChatGPT-Generated Code.  
In Proceedings of the International Conference on Evaluation and Assessment in Software Engineering (EASE 2025), Istanbul, Turkey, to appear.
- [C91] G. Annunziata, S. Lambiase, **F. Palomba**, G. Catolino, F. Ferrucci.  
How Do Communities of ML-Enabled Systems Smell? A Cross-Sectional Study on the Prevalence of Community Smells.  
In Proceedings of the International Conference on Evaluation and Assessment in Software Engineering (EASE 2025), Istanbul, Turkey, to appear.
- [C90] L. Baresi, A. De Lucia, A. Di Marco, M. Di Penta, D. Di Ruscio, L. Mariani, D. Micucci, **F. Palomba**, M. T. Rossi, F. Zampetti  
Students' Perception of ChatGPT in Software Engineering: Lessons Learned from Five Courses  
In Proceedings of the IEEE Conference on Software Engineering Education and Training (CSEE&T), Ottawa, Canada, 2025, to appear.

- [C89] V. De Martino, S. Martinez-Fernandez, **F. Palomba**.  
Do developers adopt green architectural tactics for ml-enabled systems? a mining software repository study.  
In Proceedings of the 47<sup>th</sup> IEEE/ACM International Conference on Software Engineering (ICSE 2025), Ottawa, Canada, 2025, to appear.
- [C88] G. Voria, S. Lambiase, M. C. Schiavone, G. Catolino, **F. Palomba**.  
From Expectation to Habit: Why Do Software Practitioners Adopt Fairness Toolkits?  
In Proceedings of the 47<sup>th</sup> IEEE/ACM International Conference on Software Engineering (ICSE 2025), Ottawa, Canada, 2025, to appear.
- [C87] G. Voria, S. Lambiase, M. C. Schiavone, G. Catolino, G. Robles, **F. Palomba**.  
Contextual Fairness-Aware Practices in ML: A Cost-Effective Empirical Evaluation  
In Proceedings of the 1<sup>st</sup> International Workshop on Fairness in Software Systems (Fairness 2025), Montreal, Canada, 2025, to appear - **Best Paper Award**
- [C86] G. Annunziata, C. Ferrara, S. Lambiase, **F. Palomba**, G. Catolino, F. Ferrucci, A. De Lucia.  
An Empirical Study on the Relation between Programming Languages and the Emergence of Community Smells.  
In Proceedings of the 50<sup>th</sup> Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Paris, France, 2024.
- [C85] G. De Vito, G. Vassallo, **F. Palomba**, F. Ferrucci.  
AGORA: An Approach for Generating Acceptance Test Cases from Use Cases.  
In Proceedings of the 50<sup>th</sup> Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Paris, France, 2024.
- [C84] D. Di Dario, V. Pentangelo, M. Colella, **F. Palomba**, C. Gravino.  
Collecting and Implementing Ethical Guidelines for Emotion Recognition in an Educational Metaverse.  
1st International Conference on User-Centered Practices of Knowledge Discovery in Educational Data (UKDE 2024), in press, Cagliari, Italy, 2024.
- [C83] G. Voria, G. Catolino, **F. Palomba**.  
Is Attention All You Need? Toward a Conceptual Model for Social Awareness in Large Language Models.  
In Proceedings of the 1<sup>st</sup> International Conference on AI Foundation Models and Software Engineering (FORGE 2024), in press, Lisbon, Portugal, 2024.
- [C82] G. Recupito, R. Rapacciuolo, D. Di Nucci, **F. Palomba**.  
Unmasking Data Secrets: An Empirical Investigation into Data Smells and Their Impact on Data Quality.  
In Proceedings of the 3<sup>rd</sup> International Conference on AI Engineering (CAIN 2024), in press, Lisbon, Portugal, 2024.
- [C81] C. Ferrara, F. Casillo, C. Gravino, A. De Lucia, **F. Palomba**.  
ReFAIR: Toward a Context-Aware Recommender for Fairness Requirements Engineering.  
In Proceedings of the 46<sup>th</sup> International Conference on Software Engineering (ICSE 2024), in press, Lisbon, Portugal, 2024.
- [C80] G. Annunziata, S. Lambiase, **F. Palomba**, F. Ferrucci.  
SERGE – Serious Game for the Education of Risk Management in Software Project Management.  
In Proceedings of the 46<sup>th</sup> International Conference on Software Engineering (ICSE 2024), in press, Lisbon, Portugal, 2024.
- [C79] S. Lambiase, G. Catolino, B. Della Piana, F. Ferrucci, **F. Palomba**.  
Dealing With Cultural Dispersion: A Novel Theoretical Framework for Software Engineering Research and Practice.  
In Proceedings of the 46<sup>th</sup> International Conference on Software Engineering (ICSE 2024), in press, Lisbon, Portugal, 2024.
- [C78] L. Martins, H. Costa, M. Ribeiro, **F. Palomba**, I. Machado.  
Automating Test-Specific Refactoring Mining: A Mixed-Method Investigation.

In Proceedings of the 23<sup>rd</sup> International Conference on Source Code Analysis and Manipulation (SCAM), Bogotá, Colombia, 2023.

- [C77] G. Sellitto, A. Sheykina, **F. Palomba**, A. De Lucia.  
Please, Be Realistic! An Empirical Study on the Performance of Vulnerability Prediction Models.  
In Proceedings of the 17<sup>th</sup> International Conference on Software Product and Process Measurement (MENSURA), Rome, Italy, 2023.
- [C76] G. Giordano, G. Annunziata, A. De Lucia, **F. Palomba**.  
Understanding Developer Practices and Code Smell Diffusion in AI-Enabled Software: A Preliminary Study.  
In Proceedings of the 17<sup>th</sup> International Conference on Software Product and Process Measurement (MENSURA), Rome, Italy, 2023.
- [C75] G. Giordano, G. Sellitto, A. Sepe, **F. Palomba**, F. Ferrucci.  
The Yin and Yang of Software Quality: On the Relationship between Design Patterns and Code Smells.  
In Proceedings of the 49<sup>th</sup> Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Durres, Albania, 2023 – **Best Paper Award**.
- [C74] D. Di Dario, U. Bilotti, M. Sibilio, C. Gravino, **F. Palomba**.  
Toward a Secure Educational Metaverse: A Tail of Blockchain Design for Educational Environments.  
In Proceedings of the 49<sup>th</sup> Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Durres, Albania, 2023.
- [C73] G. De Vito, S. Lambiase, **F. Palomba**, F. Ferrucci.  
Meet C4SE: Your New Collaborator for Software Engineering Tasks.  
In Proceedings of the 49<sup>th</sup> Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Durres, Albania, 2023.
- [C72] G. De Vito, **F. Palomba**, C. Gravino, S. Di Martino, F. Ferrucci.  
ECHO: An Approach to Enhance Use Case Quality Exploiting Large Language Models.  
In Proceedings of the 49<sup>th</sup> Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Durres, Albania, 2023.
- [C71] D. Di Dario, V. Pontillo, S. Lambiase, F. Ferrucci, **F. Palomba**.  
Security Testing in the Wild: An Interview Study.  
In Proceedings of the 49<sup>th</sup> Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Durres, Albania, 2023.
- [C70] S. Lambiase, G. Catolino, F. Pecorelli, D. Tamburri, **F. Palomba**, W.J. van den Heuven, F. Ferrucci.  
“There and Back Again?”: On the Influence of Software Community Dispersion over Productivity.  
In Proceedings of the 48<sup>th</sup> Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Gran Canaria, Spain, 2022 – **Best Paper Award**.
- [C69] G. Recupito, F. Pecorelli, G. Catolino, S. Moreschini, D. Di Nucci, **F. Palomba**, D. Tamburri.  
A Multivocal Literature Review on MLOps Tools and Features.  
In Proceedings of the 48<sup>th</sup> Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Gran Canaria, Spain, 2022.
- [C68] G. Giordano, **F. Palomba**, F. Ferrucci.  
A Preliminary Conceptualization and Analysis of Automated Static Analysis Tools for Vulnerability Detection in Android Apps.  
In Proceedings of the 48<sup>th</sup> Euromicro Conference Series on Software Engineering and Advanced Applications (SEAA), Gran Canaria, Spain, 2022.
- [C67] G. Voria, V. Pentangelo, A. Della Porta, S. Lambiase, G. Catolino, **F. Palomba**, F. Ferrucci.  
Community Smell Detection and Refactoring in Slack: The CADOCs Project  
In Proceedings of the 38<sup>th</sup> IEEE International Conference on Software Maintenance and Evolution (ICSME), Limassol,

Cyprus, 2022.

- [C66] S. Lambiase, G. Catolino, D. Tamburri, A. Serebrenik, **F. Palomba**, F. Ferrucci.  
Good Fences Make Good Neighbors? On the Impact of Cultural and Geographical Dispersion on Community Smells.  
In Proceedings of the 44<sup>th</sup> International Conference on Software Engineering (ICSE 2022), in press, Pittsburgh, USA, 2022.
- [C65] S. Avolicino, M. Di Gregorio, M. Romano, G. Vitiello, **F. Palomba**, M. Sebillio.  
AI-Based Emotion Recognition to Study Users' Perception of Dark Patterns.  
In Proceedings of the 24<sup>th</sup> International Conference on Human-Computer Interaction (HCII), Virtual, 2022.
- [C64] G. Sellitto, E. Iannone, Z. Codabux, V. Lenarduzzi, A. De Lucia, **F. Palomba**, F. Ferrucci.  
Toward Understanding the Impact of Refactoring on Program Comprehension.  
In Proceedings of the 29<sup>th</sup> International Conference on Software Analysis, Engineering, and Reengineering (SANER 2022), in press, Honolulu, Hawaii, USA, 2022 - **IEEE/TCSE Distinguished Paper Award**.
- [C63] G. Giordano, A. Fasulo, G. Catolino, **F. Palomba**, F. Ferrucci, C. Gravino.  
On the Evolution of Inheritance and Delegation Mechanisms and Their Impact on Code Quality.  
In Proceedings of the 29<sup>th</sup> International Conference on Software Analysis, Engineering, and Reengineering (SANER 2022), in press, Honolulu, Hawaii, USA, 2022.
- [C62] C. Sarmiento, T. Massoni, A. Serebrenik, G. Catolino, D. Tamburri, **F. Palomba**.  
Gender Diversity and Community Smells: A Double-Replication Study on Brazilian Software Teams.  
In Proceedings of the 29<sup>th</sup> International Conference on Software Analysis, Engineering, and Reengineering (SANER 2022), in press, Honolulu, Hawaii, USA, 2022.
- [C61] S. Boutaib, M. Elarbi, S. Bechikh, **F. Palomba**, L. Ben Said.  
A Possibilistic Evolutionary Approach to Handle the Uncertainty of Software Metrics Thresholds in Code Smell Detection.  
In Proceedings of the 21<sup>st</sup> International Conference on Software Quality, Reliability, and Security (QRS 2021), in press, Hainan Island, China, 2021.
- [C60] G. Catolino, **F. Palomba**, D. Tamburri, A. Serebrenik.  
Understanding Community Smells Variability: A Statistical Approach.  
In Proceedings of the 43<sup>rd</sup> International Conference on Software Engineering (ICSE 2021), in press, Madrid, Spain, 2021.
- [C59] A. Peruma, K. Almalki, C. Newman, M. Mkaouer, A. Ouni, **F. Palomba**.  
TSDetect: An Open-Source Test Smells Detection Tool.  
In Proceedings of the 28<sup>th</sup> ACM Joint Meeting on European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE 2020), pp. 1650-1654, Sacramento, USA, 2020.
- [C58] G. Grano, C. De Iaco, **F. Palomba**, H. Gall.  
Pizza Versus Pinza: On the Perception and Measurability of Unit Test Code Quality.  
In Proceedings of the 36<sup>th</sup> International Conference on Software Maintenance and Evolution (ICSME 2020), pp. 336-347, Adelaide, Australia, 2020.
- [C57] M. Di Gregorio, D. Di Nucci, **F. Palomba**, G. Vitiello.  
The Making of Accessible Android Applications: An Empirical Study on the State of the Practice.  
In Proceedings of the 36<sup>th</sup> International Conference on Software Maintenance and Evolution (ICSME 2020), pp. 857-861, Adelaide, Australia, 2020.
- [C56] F. Pecorelli, G. Di Lillo, **F. Palomba**, A. De Lucia.  
VITRUM: A Plug-In for the Visualization of Test-Related Metrics.  
In Proceedings of the 15<sup>th</sup> International Conference on Advanced Visual Interfaces (AVI 2020), pp. 1-3, Ischia, Italy, 2020.



- [C55] M. De Stefano, M. Gambardella, F. Pecorelli, **F. Palomba**, A. De Lucia.  
cASpER: A Plug-In for Automated Code Smell Detection and Refactoring.  
In Proceedings of the 15<sup>th</sup> International Conference on Advanced Visual Interfaces (AVI 2020), pp. 1-3, Ischia, Italy, 2020.
- [C54] G. Cascavilla, J. Slabber, **F. Palomba**, D. Di Nucci, D. Tamburri, W.J. van den Heuvel.  
Counterterrorism for Cyber-Physical Spaces: A Computer Vision Approach.  
In Proceedings of the 15<sup>th</sup> International Conference on Advanced Visual Interfaces (AVI 2020), pp. 1-5, Ischia, Italy, 2020.
- [C53] S. Lambiase, A. Cupito, F. Pecorelli, A. De Lucia, **F. Palomba**.  
Just-in-Time Test Smell Detection and Refactoring: The DARTS Project.  
In Proceedings of the 28<sup>th</sup> International Conference on Program Comprehension (ICPC 2020), pp. 441-445, Seoul, South Korea, 2020.
- [C52] E. Iannone, F. Pecorelli, D. Di Nucci, **F. Palomba**, A. De Lucia.  
Refactoring Android-Specific Energy Smells: A Plug-In for Android Studio.  
In Proceedings of the 28<sup>th</sup> International Conference on Program Comprehension (ICPC 2020), pp. 451-455, Seoul, South Korea, 2020.
- [C51] V. Lenarduzzi, **F. Palomba**, D. Taibi, D. Tamburri.  
Open-SZZ: A Free, Open-Source, Web-Accessible Implication of the SZZ Algorithm.  
In Proceedings of the 28<sup>th</sup> International Conference on Program Comprehension (ICPC 2020), pp. 446-450, Seoul, South Korea, 2020.
- [C50] F. Pecorelli, **F. Palomba**, F. Khohm, A. De Lucia.  
Developer-Driven Code Smell Prioritization.  
In Proceedings of the 17<sup>th</sup> International Conference on Mining Software Repositories (MSR 2020), in press, Seoul, South Korea, 2020.
- [C49] F. Pecorelli, G. Catolino, F. Ferrucci, A. De Lucia, **F. Palomba**.  
Testing of Mobile Applications in the Wild: A Large-Scale Empirical Study on Android Apps.  
In Proceedings of the 28<sup>th</sup> International Conference on Program Comprehension (ICPC 2020), pp. 296-307, Seoul, South Korea, 2020.
- [C48] G. Catolino, **F. Palomba**, D. A. Tamburri, A. Serebrenik, F. Ferrucci.  
Refactoring Community Smells in the Wild: The Practitioner's Field Manual.  
In Proceedings of the 42<sup>nd</sup> International Conference on Software Engineering (ICSE 2020), Vol. 2, pp. 25-34, Seoul, South Korea, 2020.
- [C47] L. Di Geronimo, L. Braz, E. Fregnan, **F. Palomba**, A. Bacchelli.  
UI Dark Patterns and Where to Find Them: A Study on Mobile Applications and User Perception.  
In Proceedings of the 38th ACM CHI Conference on Human Factors in Computing Systems (CHI), pp. 1-14, Honolulu, USA, 2020.
- [C46] A. Peruma, K. Almalki, C. Newman, M. Mkaouer, A. Ouni, **F. Palomba**.  
On the Distribution of Test Smells in Open-Source Android Applications: An Exploratory Study.  
In Proceedings of the 29th International Conference on Computer Science and Software Engineering (CASCON), pp. 193-202, Ontario, Canada, 2020.
- [C45] M. Eck, **F. Palomba**, M. Castelluccio, A. Bacchelli.  
Understanding Flaky Tests: The Developer's Perspective.  
In Proceedings of the 27<sup>th</sup> ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE), pp. 830-840, Tallinn, Estonia, 2019.
- [C44] D. Serra, G. Grano, **F. Palomba**, F. Ferrucci, H. Gall, A. Bacchelli.  
On the Effectiveness of Manual and Automatic Unit Test Generation: Ten Years Later.

- In Proceedings of the 16<sup>th</sup> International Conference on Mining Software Repositories (MSR 2019), pp. 121-125, Montreal, Canada, 2019.
- [C43] F. Pecorelli, **F. Palomba**, D. Di Nucci, A. De Lucia.  
Comparing Machine Learning and Heuristic Approaches for Metric-Based Code Smell Detection.  
In Proceedings of the 27<sup>th</sup> International Conference on Program Comprehension (ICPC 2019), pp. 93-104, Montreal, Canada, 2019.
- [C42] G. Catolino, **F. Palomba**, D. A. Tamburri, A. Serebrenik, F. Ferrucci.  
Gender Diversity and Women in Software Teams: How do They Affect Community Smells?  
In Proceedings of the 41<sup>st</sup> International Conference on Software Engineering (ICSE 2019), Vol. 2, pp. 11-20, Montreal, Canada, 2019.
- [C41] D. Spadini, **F. Palomba**, T. Baum, S. Hanenberg, M. Bruntink, A. Bacchelli.  
Test-Driven Code Review: An Empirical Study.  
In Proceedings of the 41<sup>st</sup> International Conference on Software Engineering (ICSE 2019), Vol. 1, pp. 1061-1072, Montreal, Canada, 2019.
- [C40] L. Pascarella, D. Spadini, **F. Palomba**, M. Bruntink, A. Bacchelli.  
Information Needs in Contemporary Code Review.  
In Proceedings of the 21<sup>st</sup> International Conference on Computer-Supported Cooperative Work and Social Computing (CSCW 2018), Vol. 1, pp. 202-213, New York, USA, 2018 – **Best Paper Honorable Mention**.
- [C39] V. Kovachenko, **F. Palomba**, A. Bacchelli.  
Mining File Histories: Should We Consider Branches?  
In Proceedings of the 33<sup>th</sup> International Conference on Automated Software Engineering (ASE 2018), Vol. 1, pp. 202-213, Montpellier, France, 2018.
- [C38] C. Vassallo, **F. Palomba**, A. Bacchelli, H. Gall.  
Continuous Code Quality: Are We (Really) Doing That?  
In Proceedings of the 33<sup>th</sup> International Conference on Automated Software Engineering (ASE 2018), Vol. 1, pp. 790-795, Montpellier, France, 2018.
- [C37] C. Vassallo, **F. Palomba**, H. Gall.  
Continuous Refactoring in CI: A Preliminary Study on the Perceived Advantages and Barriers.  
In Proceedings of the 34<sup>th</sup> International Conference on Software Maintenance and Evolution (ICSME 2018), Vol. 1, pp. 564-568, Madrid, Spain, 2018.
- [C36] **F. Palomba**, A. Zaidman, A. De Lucia.  
Automatic Test Smell Detection using Information Retrieval Techniques.  
In Proceedings of the 34<sup>th</sup> International Conference on Software Maintenance and Evolution (ICSME 2018), Vol. 1, pp. 311-322, Madrid, Spain, 2018.
- [C35] D. Spadini, **F. Palomba**, A. Zaidman, M. Bruntink, A. Bacchelli.  
On the Relation of Test Smells to Software Code Quality.  
In Proceedings of the 34<sup>th</sup> International Conference on Software Maintenance and Evolution (ICSME 2018), Vol. 1, pp. 1-12, Madrid, Spain, 2018.
- [C34] D. Di Nucci, **F. Palomba**, A. De Lucia.  
Evaluating the Adaptive Selection of Classifiers for Cross-Project Bug Prediction  
In Proceedings of the 1<sup>st</sup> International Workshop on Realizing Artificial Intelligence Synergies in Software Engineering (RAISE 2018), Vol. 2, pp. 48-54, Gothenburg, Sweden, 2018.
- [C33] P. Salza, **F. Palomba**, D. Di Nucci, C. D’Uva, A. De Lucia, F. Ferrucci.  
Do Developers Update Third-Party Libraries in Mobile Apps?  
In Proceedings of the 26<sup>th</sup> International Conference on Program Comprehension (ICPC 2018), Vol. 1, pp. 255-265, Gothenburg, Sweden, 2018.

- [C32] L. Pascarella, **F. Palomba**, M. Di Penta, A. Bacchelli.  
How is Video Game Development Different from Software Development in Open Sources?  
In Proceedings of the 15<sup>th</sup> International Conference on Mining Software Repositories (MSR 2018), Vol. 1, pp. 392-402, Gothenburg, Sweden, 2018.
- [C31] D. A. Tamburri, D. Di Nucci, L. Di Giacomo, **F. Palomba**.  
Omniscient DevOps Analytics.  
In Proceedings of the 1<sup>st</sup> International Workshop on Software Engineering Aspects of Continuous Development and New Paradigms of Software Production and Development (DEVOPS 2018), pp. 48-59, Chateau de Villebrumier, France 2018.
- [C30] L. Pascarella, F. Geiger, **F. Palomba**, D. Di Nucci, I. Malavolta, A. Bacchelli.  
Self-Reported Activities of Android Developers.  
In Proceedings of the IEEE/ACM International Conference on Mobile Software Engineering and Systems (MobileSoft 2018), Vol. 1, pp. 144-155, Gothenburg, Sweden, 2018.
- [C29] G. Grano, A. Ciurumelea, S. Panichella, **F. Palomba**, H. Gall.  
BECLoMA: Augmenting Stack Traces with User Review Information  
In Proceedings of the Tool Demo Track 25<sup>th</sup> International Conference on Software Analysis, Evolution, and Reengineering (SANER 2018), Vol. 1, pp. 522-526, Campobasso, Italy, 2018 – **Best Tool Demo Paper Award**.
- [C28] D. Di Nucci, **F. Palomba**, D. A. Tamburri, A. Serebrenik, A. De Lucia.  
Detecting Code Smells using Machine Learning Techniques: Are We There Yet?  
In Proceedings of the RENE Track of the 25<sup>th</sup> International Conference on Software Analysis, Evolution, and Reengineering (SANER 2018), Vol. 1, pp. 612-621, Campobasso, Italy, 2018.
- [C27] L. Pascarella, **F. Palomba**, A. Bacchelli.  
Re-evaluating Method-level Bug Prediction  
In Proceedings of the RENE Track of the 25<sup>th</sup> International Conference on Software Analysis, Evolution, and Reengineering (SANER 2018), Vol. 1, pp. 592-601, Campobasso, Italy, 2018.
- [C26] C. Vassallo, S. Panichella, **F. Palomba**, S. Proksch, A. Zaidman, H. Gall.  
Context is King: The Developers' Perspective on the Usage of Static Analysis Tools  
In Proceedings of the 25<sup>th</sup> International Conference on Software Analysis, Evolution, and Reengineering (SANER 2018), Vol. 1, pp. 38-49, Campobasso, Italy, 2018.
- [C25] G. Grano, A. Ciurumelea, S. Panichella, **F. Palomba**, H. Gall.  
Exploring the Integration of User Feedback in Automated Testing of Android Applications  
In Proceedings of the 25<sup>th</sup> International Conference on Software Analysis, Evolution, and Reengineering (SANER 2018), Vol. 1, pp. 72-83, Campobasso, Italy, 2018.
- [C24] **F. Palomba**, A. Serebrenik, A. Zaidman.  
Social Debt Analytics for Improving the Management of Software Evolution Tasks.  
In Proceedings of the 16<sup>th</sup> Belgian-Netherlands Software Evolution Symposium (BENEVOL 2017), pp. 18-21, Antwerp, Belgium, 2017.
- [C22] G. Catolino, **F. Palomba**, A. De Lucia, F. Ferrucci, A. Zaidman.  
Developer-Related Factors in Change Prediction: An Empirical Assessment  
In Proceedings of the 25<sup>st</sup> International Conference on Program Comprehension (ICPC 2017), Vol. 1, pp. 186-195, Buenos Aires, Argentina, 2017.
- [C21] **F. Palomba**, A. Zaidman, R. Oliveto, A. De Lucia.  
An Exploratory Study on the Relationship between Changes and Refactoring  
In Proceedings of the 25<sup>st</sup> International Conference on Program Comprehension (ICPC 2017), Vol. 1, pp. 176-185, Buenos Aires, Argentina, 2017.

- [C20] **F. Palomba**, R. Oliveto, A. De Lucia.  
Investigating Code Smell Co-Occurrences using Association Rule Mining: A Replicated Study  
In Proceedings of the 1<sup>st</sup> International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTesQuE 2017), Vol. 2, pp. 8-13, Klagenfurt, Austria, 2017.
- [C19] **F. Palomba**, D. Di Nucci, A. Panichella, A. Zaidman, A. De Lucia.  
Lightweight Detection of Android-specific Code Smells: The aDoctor Project  
In Proceedings of the 24<sup>th</sup> IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017), Vol. 1, pp. 487-491, Klagenfurt, Austria, 2017.
- [C18] D. Di Nucci, **F. Palomba**, A. Panichella, A. Zaidman, A. De Lucia.  
PETrA: A Software-based Tool for Estimating the Energy Consumption of Android Applications.  
In Proceedings of the 39<sup>th</sup> IEEE International Conference on Software Engineering (ICSE 2017), Vol. 2, pp. 3-6, Buenos Aires, Argentina, 2017.
- [C17] D. Di Nucci, **F. Palomba**, A. Panichella, A. Zaidman, A. De Lucia.  
Software-based Energy Profiling of Android Apps: Simple, Efficient and Reliable?  
In Proceedings of the 24<sup>th</sup> IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017), Vol. 1, pp. 103-114, Klagenfurt, Austria, 2017.
- [C16] **F. Palomba**, P. Salza, A. Ciurumelea, S. Panichella, H. Gall, F. Ferrucci, A. De Lucia.  
Recommending and Localizing Code Changes for Mobile Apps based on User Reviews.  
In proceedings of the 39<sup>th</sup> IEEE International Conference on Software Engineering (ICSE 2017), Vol. 1, pp. 106-117, Buenos Aires, Argentina, 2017.
- [C15] **F. Palomba**.  
Alternative Sources of Information for Code Smell Detection: Postcards from Far Away.  
In Proceedings of the 32<sup>nd</sup> IEEE International Conference on Software Maintenance and Evolution (ICSME 2016), Vol. 1, pp. 636-640, Raleigh, USA, 2016.
- [C14] M. Tufano, **F. Palomba**, G. Bavota, M. Di Penta, R. Oliveto, A. De Lucia, D. Shybyanyk.  
An Empirical Investigation Into the Nature of Test Smells.  
In Proceedings of the 31<sup>th</sup> IEEE/ACM International Conference on Automated Software Engineering (ASE 2016), Vol. 1, pp. 4-15, Singapore, Singapore, 2016.
- [C13] **F. Palomba**, M. Zanoni, F. Arcelli Fontana, A. De Lucia, R. Oliveto.  
Smells like Teen Spirit: Improving Bug Prediction Performance using the Intensity of Code Smells.  
In Proceedings of the 32<sup>nd</sup> IEEE International Conference on Software Maintenance and Evolution (ICSME 2016), Vol. 1, pp. 244-255, Raleigh, USA, 2016.
- [C12] **F. Palomba**, A. Panichella, A. Zaidman, R. Oliveto, A. De Lucia.  
Automatic Test Case Generation: What If Test Code Quality Matters?  
In Proceedings of the ACM International Symposium on Software Testing and Analysis (ISSTA 2016), Vol. 1, pp. 130-141, Saarbrücken, Germany, 2016.
- [C11] **F. Palomba**, A. Panichella, A. De Lucia, R. Oliveto, A. Zaidman.  
A Textual-based Technique for Smell Detection.  
In Proceedings of the 24<sup>th</sup> ACM/IEEE International Conference on Program Comprehension (ICPC 2016), Vol. 1, pp. 1-10, Austin, USA, 2016.
- [C10] **F. Palomba**, D. Di Nucci, A. Panichella, R. Oliveto, A. De Lucia.  
On the Diffusion of Test Smells in Automatically Generated Test Code: An Empirical Study.  
In Proceedings of the 9<sup>th</sup> ACM/IEEE International Workshop on Search Based Software Testing (SBST 2016), Vol. 2, pp. 5-14, Austin, USA, 2016.
- [C9] **F. Palomba**, M. Linares Vasquez, G. Bavota, R. Oliveto, M. Di Penta, D. Shybyanyk, A. De Lucia.  
User Reviews Matter! Tracking Crowdsourced Reviews to Support Evolution of Successful Apps.

- In Proceedings of the 31<sup>st</sup> IEEE International Conference on Software Maintenance and Evolution (ICSME 2015), Vol. 1, pp. 291-300, Bremen, Germany, 2015.
- [C8] D. Di Nucci, **F. Palomba**, S. Siravo, G. Bavota, R. Oliveto, A. De Lucia.  
On the Role of Developer's Scattered Changes in Bug Prediction.  
In Proceedings of the 31<sup>st</sup> IEEE International Conference on Software Maintenance and Evolution (ICSME 2015), Vol. 1, pp. 241-250, Bremen, Germany, 2015.
- [C7] **F. Palomba**, D. Di Nucci, M. Tufano, G. Bavota, R. Oliveto, D. Poshyvanyk, A. De Lucia.  
Landfill: an Open Dataset of Code Smells with Public Evaluation.  
In Proceedings of the 12<sup>th</sup> IEEE/ACM Working Conference on Mining Software Repositories (MSR 2015), Vol. 2., pp. 482-485, Florence, Italy, 2015.
- [C6] **F. Palomba**, M. Tufano, G. Bavota, R. Oliveto, A. Marcus, D. Poshyvanyk, A. De Lucia.  
Extract Package Refactoring in ARIES.  
In Proceedings of the 37<sup>th</sup> IEEE/ACM International Conference on Software Engineering (ICSE 2015) – IEEE Press. Formal Tool Demo Track, Vol. 2, pp. , 669-672, Florence, Italy, 2015.  
**F. Palomba.**
- [C5] Textual Analysis for Code Smell Detection.  
In Proceedings of the 37<sup>th</sup> IEEE/ACM International Conference on Software Engineering (ICSE 2015) – Student Research Competition (SRC) Track, Vol. 2., pp. 769-771, Florence, Italy, 2015. - **ACM/SIGSOFT Student Research Competition Award – Bronze Medal.**
- [C4] M. Tufano, **F. Palomba**, G. Bavota, R. Oliveto, M. Di Penta, A. De Lucia, D. Poshyvanyk.  
When and Why Your Code Starts to Smell Bad.  
In Proceedings of the 37<sup>th</sup> IEEE/ACM International Conference on Software Engineering (ICSE 2015), Vol. 1, pp. 403-414, Florence, Italy, 2015. - **ACM/SIGSOFT Distinguished Paper Award**
- [C3] **F. Palomba**, G. Bavota, M. Di Penta, R. Oliveto, A. De Lucia.  
Do They Really Smell Bad? A Study on Developers' Perception of Bad Code Smells.  
In Proceedings of the 30<sup>th</sup> IEEE International Conference on Software Maintenance and Evolution (ICSME 2014), Vol. 1, pp. 101-110, Victoria, Canada, 2014.
- [C2] **F. Palomba**, G. Bavota, M. Di Penta, R. Oliveto, A. De Lucia, D. Poshyvanyk.  
Detecting Bad Smells in Source Code Using Change History Information.  
In Proceedings of the 28<sup>th</sup> IEEE/ACM International Conference on Automated Software Engineering (ASE 2013), Vol. 1, pp. 268-278, Palo Alto, California, 2013. - **ACM/SIGSOFT Distinguished Paper Award**
- [C1] G. Bavota, A. De Lucia, A. Marcus, R. Oliveto, **F. Palomba**.  
Supporting Extract Class Refactoring in Eclipse: The ARIES Project.  
In Proceedings of the 34<sup>th</sup> International Conference on Software Engineering (ICSE 2012), Vol. 2, pp. 1419-1422, Zurich, Switzerland, 2012.

## 12.3 BOOK CHAPTERS

- [B3] Z. Codabux, F. Fard, R. Verdecchia, **F. Palomba**, D. Di Nucci, G. Recupito.  
Teaching Mining Software Respositories.  
In Teaching Empirical Research Methods in Software Engineering, to appear, 2024.
- [B2] M. De Stefano, F. Pecorelli, **F. Palomba**, D. Taibi, D. Di Nucci, A. De Lucia.  
Quantum Software Engineering Issues and Challenges: Insights from Practitioners.  
In Quantum Software Book, to appear, 2024.
- [B1] **F. Palomba**, G. Bavota, R. Oliveto, and A. De Lucia.  
Anti-Pattern Detection: Methods, Challenges, and Open Issues.

In Advances in Computers, Volume 95, pp. 201-238.

## 12.4 ITALIAN WORKSHOPS

- [W1] G. Bavota, A. De Lucia, A. Marcus, R. Oliveto, **F. Palomba**, M. Tufano.  
ARIES: An Eclipse plug-in to Support Extract Class Refactoring.  
In Proceedings of 8<sup>th</sup> Italian Workshop on Eclipse Technologies, Crema, Italy, 2013. LCNS Press.
  
- [W2] G. Bavota, A. De Lucia, R. Oliveto, **F. Palomba**, A. Panichella.  
Textual Analysis and Software Quality: Challenges and Opportunities.  
In Proceedings of 50<sup>th</sup> Italian Workshop on Computing and Distributed Computing, Salerno, Italy, 2013.

Fisciano, 15/05/2025

A handwritten signature in black ink, appearing to read 'Fabio Palomba', with a stylized, flowing script.