Dario Di Nucci

Curriculum Vitae - Including Summary of Publications

Dario Di Nucci, Male, Italian **DATE OF BIRTH:** September 3rd, 1988 **PLACE OF BIRTH:** Isernia, Italy **Languages:** Italian (native), English (C1)	**E-MAIL:** ddinucci@unisa.it **WEBSITE:** http://dardin88.github.io

Dario Di Nucci is an assistant professor at the Software Engineering (SeSa) Lab of the University of Salerno. He received a European Ph.D. degree in Management & Information Technology from the University of Salerno in 2018, advised by Prof. Andrea De Lucia.

His research is on empirical software engineering, particularly software maintenance and evolution and software testing, where he applies machine learning, search-based algorithms, and mining of software repositories.

He is a member at large of the IEEE Conference Activities Committee. He serves as editor for ACM Transactions on Software Engineering and Methodology, Elsevier Journal of Systems and Software, Elsevier Science of Computer Programming, program committee member for international conferences, and referee for international journals in software engineering and artificial intelligence, for which he received several Distinguished/Outstanding Reviewer Awards. He is an IEEE Software Initiative team member.

LICENSES AND CERTIFICATIONS

2023	**ABILITAZIONE SCIENTIFICA NAZIONALE - SETTORE CONCORSUALE 09/H1** **SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI - FASCIA I** Issued by Italian Ministry of University and Research. Valid from 15/06/2023 to 15/06/2034 https://asn21.cineca.it/pubblico/miur/esito/09%252FH1/1/5
2022	**BASIC KWALIFICATIE ONDERWIJS (BKO) - UNIVERSITY TEACHING QUALIFICATION (UTQ)** Issued by Tilburg University
2020	**ABILITAZIONE SCIENTIFICA NAZIONALE - SETTORE CONCORSUALE 01/B1** **INFORMATICA - FASCIA II** Issued by Italian Ministry of University and Research. Valid from 23/11/2020 to 23/11/2030 https://asn18.cineca.it/pubblico/miur/esito-abilitato/01%252FB1/2/5 **ABILITAZIONE SCIENTIFICA NAZIONALE - SETTORE CONCORSUALE 09/H1** **SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI - FASCIA II** Issued by Italian Ministry of University and Research. Valid from 13/11/2020 to 13/11/2030 https://asn18.cineca.it/pubblico/miur/esito-abilitato/09%252FH1/2/5
2014	**ABILITAZIONE ALLA PROFESSIONE DI INGEGNERE** Issued by University of Molise in December 2014

EMPLOYMENT HISTORY

01/2022 - CURRENT	**ASSISTANT PROFESSOR (I.E., RICERCATORE A TEMPO DETERMINATO DI TIPO B)** University of Salerno (UNISA), Italy - Unit Leader of the MUR PRIN project RECHARGE - Principal Investigator of the MUR PRIN project SMARTITUDE - Course Holder and Lecturer for several courses (see the Teaching section)
01/2020 - 12/2021	**ASSISTANT PROFESSOR** Jheronimus Academy of Data Science (JADS), Tilburg University, The Netherlands - Work Package Leader of the EU Horizon 2020 project RADON (https://radon-h2020.eu/)

- M.Sc. Thesis Coordinator
- Course Holder and Lecturer for several courses (see the Teaching section)

01/2018 - 12/2019 **POST-DOCTORAL RESEARCHER**
Vrije Universiteit Brussel (VUB), Belgium
- Researcher in the FWO EOS project SECO-ASSIST (https://secoassist.github.io/)
- Researcher in the Innoviris TeampUP project INTiMALS http://soft.vub.ac.be/intimals/
- Lecturer of Capita Selecta of Software Engineering (M.Sc. in Computer Science)

12/2014 - 03/2018 **PH.D. STUDENT IN MANAGEMENT & INFORMATION TECHNOLOGY**
UNISA, Italy
Fully funded by UNISA. Advisor: Prof. Andrea De Lucia

EDUCATION

12/2014 - 03/2018 **DOCTOR OF PHILOSOPHY (PH.D.) IN MANAGEMENT & INFORMATION TECHNOLOGY**
UNISA, Italy
Fully funded by UNISA
Dissertation: "Methods and Tools for Focusing and Prioritizing the Testing Effort"
Advisor: Prof. Andrea De Lucia

06/2017 **13TH INTERNATIONAL SUMMER SCHOOL ON SOFTWARE ENGINEERING (ISSSE)**
UNISA, Italy

03/2017 - 05/2017 **VISITING STUDENT**
05/2016 - 07/2016 Delft University of Technology, The Netherlands
Advisor: Prof. Andy Zaidman

06/2016 **12TH INTERNATIONAL SUMMER SCHOOL ON SOFTWARE ENGINEERING (ISSSE)**
UNISA, Italy

09/2015 **INTERNATIONAL SUMMER SCHOOL ON SOFTWARE ENGINEERING (SE SCHOOL@UNIBZ 2015)**
Free University of Bolzano, Italy

03/2013 **ERASMUS IP HUMAN-MACHINE INTERACTION**
Reims, France

10/2011 - 09/2014 **MASTER'S DEGREE (M.SC.) IN COMPUTER SCIENCE**
UNISA, Italy
110/110 cum laude
Dissertation: "A defect prediction model based on relationships between developers and modified files"
Promotor: Prof. Andrea De Lucia

10/2007 - 05/2011 **BACHELOR'S DEGREE (B.SC.) IN COMPUTER SCIENCE**
University of Molise, Italy
110/110 cum laude
Dissertation: "Applications of mathematical models to semantic research"
Promotor: Prof. Giovanni Capobianco

PROMOTED COLLABORATIVE RESEARCH PROJECTS

11/2023 - 11/2025 **RECHARGE: MONITORING, DETECTION, AND CHARACTERIZATION OF PERFORMANCE REGRESSIONS**
Funder: MUR - PRIN: Progetti di Ricerca di Rilevante Interesse Nazionale – Bando 2022 PNRR
Role: Unit Leader - Additional Promotors: Vittorio Cortellessa (UNIVAQ), Rocco Oliveto (UNIMOL)

09/2023 - 09/2025   SMARTITUDE: AUTOMATED TESTING AND SECURITY ASSESSMENT OF SMART CONTRACTS
Funder: MUR - PRIN: Progetti di Ricerca di Rilevante Interesse Nazionale – Bando 2022
Role: Principal Investigator - Additional Promotors: Carlos E. Budde (UNITN), Mariano Ceccato (UNIVR)

TEACHING

CURRENTLY TAUGHT COURSES

OBJECT ORIENTED PROGRAMMING (mandatory course of the bachelor's in Computer Science)
UNISA, taught with Prof. Vincenzo Deufemia, Fall 2023 and Fall 2022

SOFTWARE DEPENDABILITY (mandatory course of the master's in Computer Science)
UNISA, Fall 2023, Spring 2023
UNISA, Spring 2022 (taught with Dr. Fabio Palomba)

SOFTWARE ENGINEERING FOR SECURE CLOUD SYSTEMS (mandatory course of the master's in IT Security and Cloud Technologies)
UNISA, taught with Prof. Carmine Gravino, Spring 2024

FUNDING AND MANAGEMENT OF RESEARCH PROJECTS (course of the Ph.D. in Computer Science)
UNISA, taught with Prof. Andrea De Lucia, Winter 2023

PAST TAUGHT COURSES

EMPIRICAL RESEARCH METHODS (course of the Ph.D. in Computer Science)
UNISA, taught with Dr. Fabio Palomba, Summer 2023

INTRODUCTION TO MACHINE LEARNING (mandatory course of the Pre-master's in Data Science and Entrepreneurship)
JADS, Spring 2021
JADS, course holder: Prof. Damian A. Tamburri, Spring 2020

DATA ENGINEERING (mandatory course of the master's in Data Science and Entrepreneurship)
JADS, course holder: Prof. Willem-Jan van den Heuvel, Fall 2021 and Fall 2020

DATA STATISTICS (mandatory course of the bachelor's in Data Science)
Tilburg University, The Netherlands, course holder: Prof. Maurits C. Kaptein, Fall 2019

CAPITA SELECTA OF SOFTWARE ENGINEERING (elective course of the master's in Computer Science)
VUB, course holder: Prof. Coen De Roover, annual course, 2019/2020 and 2018/2019

TEACHING ASSISTANT

SOFTWARE ENGINEERING, MANAGEMENT, AND EVOLUTION (mandatory course of the master's in Computer Science)
UNISA, course holder: Prof. Andrea De Lucia, Spring 2017 and Spring 2016

SOFTWARE ENGINEERING (mandatory course of the bachelor's in Computer Science)
UNISA, course holder: Prof. Andrea De Lucia, Fall 2016 and Fall 2015

WEB DEVELOPMENT (mandatory course in the bachelor's in Computer Science)
UNISA, Fall 2016

PROGRAMMING (mandatory course in the bachelor's in Computer Science)
UNISA, Fall 2016 (course holder: Dr. Riccardo Di Stasi)
UNISA, Fall 2015 (course holder: Prof. Enrico Fischetti)

SOFTWARE ENGINEERING: MAINTENANCE AND TESTING (mandatory course of the master's in Computer Science)

UNISA, course holder: Prof. Andrea De Lucia, Fall 2015

SUPERVISION

SUPERVISED PH.D. THESES

2023   **[PT2] CATCHING BUGS IN THE CLOUD: PREDICTIVE MAINTENANCE OF IaC VIA DEFECT PREDICTION AND CODE SMELL DETECTION TO CONTINUOUSLY IMPROVE QUALITY**
Stefano Dalla Palma - Promotor: Prof. Willem-Jan van den Heuvel - Tilburg School of Humanities and Digital Science

2020   **[PT1] AN AUTOMATED DELTA-DEBUGGING APPROACH TO RESILIENCE TESTING OF ACTOR SYSTEMS THROUGH FAULT INJECTION**
Jonas De Bleser - Promotor: Prof. Coen De Roover - VUB

PROMOTED MASTER'S THESES

2023   **[MT19] INFRASTRUCTURE-AS-CODE DEFECT PREDICTION USING PROGRAM DEPENDENCE GRAPH METRICS**
Gerardo Iuliano - M.Sc. in Computer Science - UNISA

[MT18] DEFECT PREDICTION IN TERRAFORM USING PRODUCT METRICS
Gerardo Brescia - M.Sc. in Computer Science - UNISA

2022   **[MT17] MACHINE LEARNING FOR CODE SEARCH: A SYSTEMATIC REVIEW AND INDUSTRIAL FEASIBILITY STUDY**
Ashley Van Can - M.Sc. in Data Science and Entrepreneurship – JADS

[MT14] DUTCH TEXT GENERATION TO COMBAT CLASS IMBALANCE
Ellen Mans - M.Sc. in Data Science and Entrepreneurship - JADS

[MT10] PREDICTING REVENUE OF COMMERCIAL CLIENTS OF A DUTCH FINANCIAL INSTITUTION USING MACHINE LEARNING
Jens van de Zande - M.Sc. in Data Science and Entrepreneurship - JADS

SUPERVISED MASTER'S THESES

2022   **[MT16] DETECTING ROAD SURFACE ANOMALIES USING MULTIMODAL MACHINE LEARNING**
Joël Luijmes - M.Sc. in Data Science and Entrepreneurship - Promotor: Prof. Willem-Jan van den Heuvel - JADS

[MT15] ON THE USE OF AUTOMATIC CLASSIFICATION FOR BUG TRIAGING IN INDUSTRY
Christos Kitsanelis - M.Sc. in Computer Science and Engineering - Promotor: Dr. Eleni Constantinou – TU/e

2021   **[MT13] ENRICHING A POINTS-OF-INTEREST DATASET BY APPLYING LOCATION EXTRACTION AND WEBSITE CLASSIFICATION ON SCRAPED BUSINESS WEBSITES**
Paulo Rijnberg - M.Sc. in Data Science and Entrepreneurship - Promotor: Dr. Daan Kolkman - JADS

[MT12] TOWARD FURTHER AUTOMATION OF WEAK SUPERVISION - A TEXT CLASSIFICATION CASE STUDY
Christos Papasimos - M.Sc. in Data Science and Entrepreneurship - Promotor: Prof. Damian A. Tamburri - JADS

[MT11] VARIATIONAL TASK ENCODERS FOR MODEL-AGNOSTIC META-LEARNING WITH UNCERTAINTY OVER TASK DISTRIBUTIONS
Luuk Schagen - M.Sc. in Data Science and Entrepreneurship - Promotor: Dr. Joaquin Vanschoren - JADS

[MT9] PREDICTING SECURITY-RELEVANT COMMITS WITH STATIC CODE ANALYZERS
Therese Fehrer - M.Sc. in Data Science and Entrepreneurship - Promotor: Prof. Damian A. Tamburri - JADS

| 2020 | **[MT8] SOURCE CODE MEASUREMENTS FOR MACHINE LEARNING-BASED SMELL DETECTION IN INFRASTRUCTURE AS CODE: A TOSCA CASE-STUDY** |

[MT8] SOURCE CODE MEASUREMENTS FOR MACHINE LEARNING-BASED SMELL DETECTION IN INFRASTRUCTURE AS CODE: A TOSCA CASE-STUDY
Chiel van Asseldonk - M.Sc. in Data Science and Entrepreneurship - Promotor: Prof. Damian A. Tamburri - JADS

[MT7] MEASURING COMPETITIVENESS BASED ON INSTAGRAM FOLLOWER COMMUNICATION
Niels van Gorsel - M.Sc. in Data Science and Entrepreneurship - Promotor: Dr. Shantanu Mullick - JADS

[MT6] HEURISTIC-GUIDED RESILIENCE TESTING OF PERSISTENT ACTOR IMPLEMENTATIONS
Patrick Muriuki Gakuo - M.Sc. in Computer Science - Promotor: Prof. Coen De Roover - VUB

2016   **[MT5] CHECKAPP: A TOOL FOR MONITORING JAVA APPLICATION PERFORMANCE**
Elisa D'Eugenio - M.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

[MT4] PETRA: A POWER ESTIMATION TOOL FOR ANDROID APPLICATIONS
Antonio Prota - M.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

2015   **[MT3] DEVELOPMENT AND COMPARISON OF NOVEL TECHNIQUES FOR SEARCH-BASED TEST DATA GENERATION**
Giovanni Grano - M.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

[MT2] DESIGN AND DEVELOPMENT OF A TOOL FOR THE AUTOMATIC GENERATION OF TEST CASES
Simone Scalabrino - M.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

[MT1] A COMBINED MODEL FOR THE PREDICTION OF DEFECTS
Giuseppe De Rosa - M.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

PROMOTED BACHELOR'S THESES

2022   **[BT12] BLOCKCHAIN ANALYSIS AND DEVELOPMENT OF AN APPLICATION IN SOLIDITY**
Luigi Allocca - B.Sc. in Computer Science – UNISA

[BT11] ANALYSIS OF AUTONOMOUS DRIVING SYSTEMS IN A SIMULATED ENVIRONMENT
Mihai Alexandru Burlacu - B.Sc. in Computer Science - UNISA

SUPERVISED BACHELOR'S THESES

2022   **[BT13] ENERGY CONSUMPTION OF DATA STRUCTURES IN JAVA: AN EMPIRICAL STUDY**
Nicolò Delogu - B.Sc. in Computer Science - Promotor: Dr. Fabio Palomba - UNISA

[BT10] IDENTIFICATION OF LINGUISTIC SMELLS IN INFRASTRUCTURE AS CODE
Danilo Aliberti - B.Sc. in Computer Science - Promotor: Dr. Fabio Palomba - UNISA

2017   **[BT9] DESIGN AND DEVELOPMENT OF METHODS FOR TEST CASE MINIMIZATION**
Francesco De Feo - B.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

[BT8] DESIGN AND DEVELOPMENT OF METHODS FOR TEST CASE PRIORITIZATION
Giuseppe Sessa - B.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

[BT7] DESIGN AND DEVELOPMENT OF A PLUGIN FOR OPTIMIZING REGRESSION TESTING
Gerardo Della Monica - B.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

[BT6] DESIGN AND DEVELOPMENT OF A PLUGIN FOR DETECTING ENERGY DEFECTS OF MOBILE APPLICATIONS
Sara Zaino - B.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

[BT5] DESIGN AND DEVELOPMENT OF A DEFECT PREDICTION TOOL
Giuseppina Tufano - B.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

[BT4] DEVELOPMENT OF A SOFTWARE ENERGY ESTIMATION METHODOLOGY IN AN INTEGRATED DEVELOPMENT ENVIRONMENT
Roberto Contaldo - B.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

[BT3] DESIGN AND DEVELOPMENT OF A DEFECT PREDICTION TOOL BY USING CROSS-PROJECT TECHNIQUES
Pasquale Martiniello - B.Sc. in Computer Science - Advisor: Prof. Andrea De Lucia - UNISA

2016   **[BT2]** TRIO: A TOOL FOR REGRESSION TESTING OPTIMIZATION
Antonio Luca D'Avanzo - B.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

[BT1] DESIGN AND DEVELOPMENT OF A DEFECT PREDICTION TOOL
Fabiano Pecorelli - B.Sc. in Computer Science - Promotor: Prof. Andrea De Lucia - UNISA

PROFESSIONAL SERVICES TO THE SCIENTIFIC COMMUNITY

EDITORIAL BOARD MEMBER OF INTERNATIONAL SCIENTIFIC JOURNALS

01/2024 – CURRENT	ACM Transactions on Software Engineering and Methodology - Editor
10/2023 – CURRENT	Elsevier Journal of Systems and Software (JSS) - Area Editor
03/2021 – 10/2023	Elsevier Journal of Systems and Software (JSS) - Editor
05/2021 – CURRENT	Elsevier Science of Computer Programming (SCICO) - Editor
05/2020 – CURRENT	IEEE Software Initiatives Team
09/2020	Guest Editor for Elsevier Science of Computer Programming (SCICO) for the Special Issue on "Software Health of Software Ecosystems"

REVIEWER FOR INTERNATIONAL SCIENTIFIC JOURNALS

Transactions on Software Engineering - IEEE
Transactions on Software Engineering and Methodology - ACM
IEEE Software - IEEE
Journal of Systems and Software - Elsevier
Empirical Software Engineering - Springer
Journal of Software: Evolution and Process - Wiley
Information and Software Technology - Elsevier
Science of Computer Programming - Elsevier
IEEE Access - IEEE
IET Software - Institution of Engineering and Technology
Software Quality Journal – Springer

ORGANIZATION OF SCIENTIFIC EVENTS

2024   **FINANCE CHAIR**
28th International Conference on Evaluation and Assessment in Software Engineering (EASE 2024)
Salerno, Italy

2023   **PROGRAM CHAIR**
49th Euromicro Conference on Software Engineering and Advanced Applications (Euromicro SEAA 2023)
Durres, Albania

CHAIR
16th International Summer School on Software Engineering (ISSSE)

Salerno, Italy

PROGRAM CHAIR
15th Seminar on Advanced Techniques & Tools for Software Evolution (SATToSE 2023)
Salerno, Italy

2021   **ORGANIZER**
20th Belgium-Netherlands Software Evolution Workshop (BENEVOL)
Virtual (originally 's-Hertogenbosch, The Netherlands)

TOOL DEMO CHAIR
29th IEEE/ACM International Conference on Program Comprehension (ICPC)
Virtual (originally Madrid, Spain)

2020   **ORGANIZER**
3rd International Workshop on Software Health (SoHeal)
Virtual (originally Seoul, South Korea)

PUBLICITY CHAIR
28th IEEE/ACM International Conference on Program Comprehension (ICPC)
Virtual (originally Seoul, South Korea)

2019   **ORGANIZER**
18th Belgium-Netherlands Software Evolution Workshop (BENEVOL)
Brussels, Belgium

2017   **SCIENTIFIC SECRETARIAT**
13th International Summer School on Software Engineering (ISSSE)
Salerno, Italy

2016   **SCIENTIFIC SECRETARIAT**
12th International Summer School on Software Engineering (ISSSE)
Salerno, Italy

PROGRAM COMMITTEE MEMBER OF INTERNATIONAL CONFERENCES

2024   40th IEEE International Conference on Software Maintenance and Evolution (ICSME)
Research Track

46th IEEE/ACM International Conference on Software Engineering (ICSE)
Student Research Competition

21st IEEE/ACM International Conference on Mining Software Repositories (MSR)
Technical Papers Track

32nd IEEE/ACM International Conference on Program Comprehension (ICPC)
Research Track

31st IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)
Research Track

32nd ACM Foundations of Software Engineering (FSE)
Research Track

2023   23rd IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM)
Research Track, Artifact Evaluation Track

23rd International Conference on Product-Focused Software Process Improvement 2023 (PROFES)
Research Track

39th IEEE International Conference on Software Maintenance and Evolution (ICSME)
Research Track, New Ideas and Emerging Results Track, Tool Demo Track, Artifact Evaluation Track

10th European Conference on Service-Oriented and Cloud Computing (ESOCC)
Research Track

45th IEEE/ACM International Conference on Software Engineering (ICSE)
Software Engineering in Practice Track, Artifact Evaluation Track, Poster Track

31st IEEE/ACM International Conference on Program Comprehension (ICPC)
Research Track

20th IEEE/ACM International Conference on Mining Software Repositories (MSR)
Technical Papers Track

30th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)
Research Track

2022   22nd IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM)
Research Track, Artifact Evaluation Track

38th IEEE International Conference on Software Maintenance and Evolution (ICSME)
Tool Demo Track, Artifact Evaluation Track

44th IEEE/ACM International Conference on Software Engineering (ICSE)
Student Research Competition Track

30th IEEE/ACM International Conference on Program Comprehension (ICPC)
Research Track

9th IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft)
Technical Papers Track

19th IEEE/ACM International Conference on Mining Software Repositories (MSR)
Technical Papers Track, Registered Report Track

9th European Conference on Service-Oriented and Cloud Computing (ESOCC)
Project Track

29th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)
Research Track

2021   21st IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM)
Research Track, Artifact Evaluation Track

37th IEEE International Conference on Software Maintenance and Evolution (ICSME)
Tool Demo Track, Artifact Evaluation Track

8th IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft)
Technical Papers Track

28th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)
Research Track, Reproducibility Studies and Negative Results Track, Tool Demo Track

2020   20th IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM)

New Ideas and Emerging Results Track

28th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE)
Tool Demo Track

35th IEEE/ACM International Conference on Automated Software Engineering (ASE)
Late Breaking Results Track

46th Euromicro Conference on Software Engineering and Advanced Applications (SEAA)
Journal First Track

28th International Conference on Program Comprehension (ICPC)
Research Track

27th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)
Research Track, Journal First Track, Tool Demo Track

2019   35th IEEE International Conference on Software Maintenance and Evolution (ICSME)
Tool Demo Track

27th ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE)
Artifact Evaluation Track

6th IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft)
Student Research Competition

2018   34th IEEE International Conference on Software Maintenance and Evolution (ICSME)
Tool Demo Track

5th IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft)
Student Research Competition

PROGRAM COMMITTEE MEMBER OF INTERNATIONAL WORKSHOPS

2023   2nd International Workshop on Engineering Intelligent Applications' Code (ENIAC)

2nd International Workshop on the Foundations of Infrastructure Specification and Testing (FIST)

2022   6th International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTeSQuE)

1st International Workshop on Quantum Programming for Software Engineering (QP4SE)

1st International Workshop on the Foundations of Infrastructure Specification and Testing (FIST)

2021   5th International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTeSQuE)

4th International Workshop on Software Health (SoHeal)

2020   19th Belgium-Netherlands Software Evolution Workshop (BENEVOL)

4th International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTeSQuE)

2019   2nd International Workshop on Cloud-Native Applications Design and Experience (CNAX)

3rd International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTeSQuE)

2018 1st International Workshop on Cloud-Native Applications Design and Experience (CNAX)

2nd Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTeSQuE)

REVIEWER FOR INTERNATIONAL CONFERENCES

2022 38th IEEE International Conference on Software Maintenance and Evolution (ICSME)
Research Track

15th Innovations in Software Engineering Conference (ISEC)

2021 29th International Conference on Program Comprehension (ICPC)
Research Track

2020 36th IEEE International Conference on Software Maintenance and Evolution (ICSME)
Research Track

24th International Conference on Evaluation and Assessment in Software Engineering (EASE)
Research Track

2019 35th IEEE International Conference on Software Maintenance and Evolution (ICSME)
Research Track

27th International Conference on Program Comprehension (ICPC)
Research Track

16th IEEE/ACM International Conference on Mining Software Repositories (MSR)
Technical Papers Track

2018 34th IEEE International Conference on Software Maintenance and Evolution (ICSME)
Research Track

25th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)
Research Track

2019 24th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER)
Research Track

2017 19th International Conference on Enterprise Information Systems (ICEIS)

2016 32nd IEEE International Conference on Software Maintenance and Evolution (ICSME)
New Ideas and Emerging Results Track

24th International Conference on Program Comprehension (ICPC)
Research Track

19th International Conference on Business Information Systems (BIS)

22nd International Conference on Distributed Multimedia Systems (DMS)

18th International Conference on Enterprise Information Systems (ICEIS)

2015 18th International Conference on Business Information Systems (BIS)

21st International Conference on Distributed Multimedia Systems (DMS)

17th International Conference on Enterprise Information Systems (ICEIS)

INVITED TALKS

2023   **[T13] THE QUANTUM FRONTIER OF SOFTWARE ENGINEERING AND ITS ADOPTION**
SWForum.eu: Workshop on Future Challenges in SE, Politecnico di Milano, Milan, June 27th, 2023

[T12] THE DO'S AND DON'TS OF INFRASTRUCTURE CODE: A SYSTEMATIC GREY LITERATURE REVIEW
Dagstuhl Seminar 23082, Dagstuhl, February 21st, 2023

2022   **[T11] MACHINE LEARNING FOR SOFTWARE ENGINEERING: THE NEW GOLD RUSH**
Smart Services and Data-driven Societies Summit, University of Molise, Termoli, Italy, July 25th, 2022

2021   **[T10] CODE SMELL DETECTION: THE ECSTASY OF MACHINE LEARNING**
Utrecht University, Utrecht, October 6th, 2021

[T9] MACHINE LEARNING FOR SOFTWARE ENGINEERING: THE GOOD, THE BAD, AND THE UGLY
University of Milano Bicocca, Virtual, July 7th, 2021

[T8] IMPROVING ENERGY EFFICIENCY OF MOBILE APPLICATIONS IN THE INTERNET OF THINGS
Summer School on IoT, UNISA, Virtual, April 9th, 2021

2020   **[T7] MACHINE LEARNING FOR SOFTWARE ENGINEERING: THE GOOD, THE BAD, AND THE UGLY**
Eindhoven University of Technology, Virtual, December 10th, 2020

[T6] IMPROVING ENERGY EFFICIENCY OF MOBILE APPLICATIONS IN THE INTERNET OF THINGS
Summer School on IoT, UNISA, Virtual, June 3rd, 2020

[T5] DEFECT PREDICTION: USING MACHINE LEARNING FOR FOCUSING THE TESTING EFFORT
UNISA, Virtual, March 25th, 2020

2019   **[T4] MINING SOURCE CODE^3: MINING IDIOMS, USAGES, AND EDITS**
FOSDEM, Brussels, Belgium, February 3rd, 2019

2018   **[T3] DEFECT PREDICTION: USING MACHINE LEARNING FOR FOCUSING THE TESTING EFFORT**
JADS, 's-Hertogenbosch, The Netherlands, March 9th, 2018

2017   **[T2] DEFECT PREDICTION: USING MACHINE LEARNING FOR FOCUSING THE TESTING EFFORT**
JADS, 's-Hertogenbosch, The Netherlands, December 5th, 2017

[T1] DIAGNOSE AND DETECT ENERGY FLAWS OF ANDROID APPS
VUB, Brussels, Belgium. March 23rd, 2017

MEMBERSHIPS

04/2021 - CURRENT   **MEMBER-AT-LARGE OF THE IEEE CONFERENCE ACTIVITIES COMMITTEE (CAC)**

11/2020 – 12/2021   **CO-LEADER OF THE OASIS TOSCA EMERGING COMPUTE PLATFORMS AD-HOC (TOSCA-ECAH)**

01/2020 - 12/2021T   **MEMBER OF THE OASIS TOSCA TECHNICAL COMMITTEE**

AWARDS

2023   **BEST REVIEWER AWARD 2022**
Journal of Systems and Software (JSS), Elsevier

2022   **TOP REVIEWER AWARD 2021**
Information and Software Technology (IST), Elsevier

BEST REVIEWER AWARD 2021
Journal of Systems and Software (JSS), Elsevier

2021 DISTINGUISHED REVIEWER AWARD 2020
Transactions on Software Engineering and Methodologies (TOSEM), ACM

BEST REVIEWER AWARD 2020
Journal of Systems and Software (JSS), Elsevier

2020 BEST REVIEWER AWARD 2019
Journal of Systems and Software (JSS), Elsevier

2017 NSF TRAVEL SUPPORT
Symposium on Search-Based Software Engineering (SSBSE), Raleigh, NC, United States

2015 ACM SIGSOFT STUDENT TRAVEL GRANT
37th ACM/IEEE International Conference on Software Engineering (ICSE), Florence, Italy

COMMITTEE MEMBER OF PH.D. JURIES

2020 INVESTIGATING PERFORMANCE ISSUES IN MOBILE APPS
Teerath Das, Gran Sasso Science Institute, Italy
advised by Prof. Massimiliano Di Penta and Dr. Ivano Malavolta

COMMITTEE MEMBER OF PDENG JURIES

2021 PREDICTING SALES QUANTITY FOR NEWLY PUBLISHED BOOKS IN BRUNA STORES
Kristof Menyhert, JADS, The Netherlands

CUSTOMER ANALYSIS AND A DESIGN OF A CROSS-DOMAIN PERSONALIZED RECOMMENDER SYSTEM FOR AUDAX GROEP
Bethany Orense, JADS, The Netherlands

ACADEMIC RECORD

Journal Articles: 23
Conference Papers: 14 (main track), 8 (tool demonstration track), 6 (miscellaneous tracks)
Workshop Papers: 11

Citations: 2,134 on Google Scholar, h-index: 25, https://scholar.google.it/citations?user=YJqcbnIAAAAJ
1,372 on Elsevier Scopus, h-index: 20, https://www.scopus.com/authid/detail.uri?authorId=57016777600
947 on Clarivate Web of Science, h-index: 19, https://www.webofscience.com/wos/author/record/833395

JOURNAL PAPERS

[J23] AUTOMATED MAPPING OF VULNERABILITY ADVISORIES ONTO THEIR FIX COMMITS IN OPEN SOURCE REPOSITORIES
D. Hommersom, A. Sabetta, B. Coppola, D. Di Nucci, D. A. Tamburri,
ACM Transactions on Software Engineering and Methodology, 2024, to appear, 28 pages

[J22] MACHINE LEARNING-BASED TEST SMELL DETECTION
V. Pontillo, D. Amoroso d'Aragona, F. Pecorelli, D. Di Nucci, F. Ferrucci, F. Palomba
Springer Empirical Software Engineering (EMSE), 2024, to appear, 49 pages

[J21] SOLAR: AUTOMATED TEST-SUITE GENERATION FOR SOLIDITY SMART CONTRACTS
S.W. Driessen, D. Di Nucci, D.A. Tamburri, W.-J. van den Heuvel
Elsevier Science of Computer Programming (SCICO), 2024, Volume 232, 5 pages

[J20] BAYESIAN META-ANALYSIS OF SOFTWARE DEFECT PREDICTION WITH MACHINE LEARNING
M. Mohammadi, D. Di Nucci and D. A. Tamburri
IEEE Transactions on Industrial Cyber-Physical Systems (TICPS), 2023, Volume 1, 10 pages, 147-156

[J19] A TEXT CLASSIFICATION APPROACH TO API TYPE RESOLUTION FOR INCOMPLETE CODE SNIPPETS
C. Velázquez-Rodríguez, D. Di Nucci, C. De Roover
Elsevier Science of Computer Programming (SCICO), 2023, Volume 227, 26 pages

[J18] "THROUGH THE LOOKING-GLASS..." AN EMPIRICAL STUDY ON BLOB INFRASTRUCTURE BLUEPRINTS IN TOSCA
S. Dalla Palma, C. van Asseldonk, G. Catolino, D. Di Nucci, F. Palomba, D. A. Tamburri
Wiley Journal of Software: Evolution and Process (JSEP), 2023, 22 pages

[J17] FINDICI: USING MACHINE-LEARNING TO DETECT LINGUISTIC INCONSISTENCIES BETWEEN CODE AND NATURAL LANGUAGE DESCRIPTIONS IN INFRASTRUCTURE-AS-CODE
N. Borovits, I. Kumara, D. Di Nucci, P. Krishnan, S. Dalla Palma, F. Palomba, D. A. Tamburri, W.-J. van den Heuvel
Springer Empirical Software Engineering (EMSE), 2022, Volume 27, Issue 7, 30 pages

[J16] THE MAKING OF ACCESSIBLE ANDROID APPLICATIONS: AN EMPIRICAL STUDY ON THE STATE OF THE PRACTICE
M. Di Gregorio, D. Di Nucci, F. Palomba, G. Vitiello
Springer Empirical Software Engineering (EMSE), 2022, Volume 27, Issue 6, 37 pages

[J15] GO SERVERLESS WITH RADON! A PRACTICAL DEVOPS EXPERIENCE REPORT
S. Dalla Palma, G. Catolino, D. Di Nucci, D. A Tamburri, W.-J. van den Heuvel
IEEE Software, 2022, Volume 40, Issue 2, 10 pages, 80-89

[J14] SOFTWARE ENGINEERING FOR QUANTUM PROGRAMMING: HOW FAR ARE WE?
M. De Stefano, F. Pecorelli, D. Di Nucci, F. Palomba, A. De Lucia
Elsevier Journal of Systems and Software (JSS), 2022, Volume 190, 15 pages

[J13] THE DO'S AND DON'TS OF INFRASTRUCTURE CODE: A SYSTEMATIC GREY LITERATURE REVIEW
I. Kumara, M. Garriga, A. U. Romeu, F. Palomba, D. Di Nucci, D. A. Tamburri, W.-J. van den Heuvel
Elsevier Information and Software Technology (INFSOFT), 2021, Volume 137, 20 pages

[J12] ADAPTIVE SELECTION OF CLASSIFIERS FOR BUG PREDICTION: A LARGE-SCALE EMPIRICAL ANALYSIS OF ITS PERFORMANCES AND A BENCHMARK STUDY
F. Pecorelli, D. Di Nucci
Elsevier Science of Computer Programming (SCICO), 2021, Volume 295, 18 pages

[J11] WITHIN-PROJECT DEFECT PREDICTION OF INFRASTRUCTURE-AS-CODE USING PRODUCT AND PROCESS METRICS
S. Dalla Palma, D. Di Nucci, F. Palomba, D. A. Tamburri
IEEE Transactions on Software Engineering (TSE), 2021, Volume 48, Issue 6, 19 pages, 2086-2104

[J10] PRIORITISING SERVER SIDE REACHABILITY VIA INTER-PROCESS CONCOLIC TESTING
M. Vandercammen, L. Christophe, D. Di Nucci, W. De Meuter, C. De Roover
The Art, Science, and Engineering of Programming, 2021, Volume 5, Issue 2, 34 pages

[J9] ANSIBLEMETRICS: A PYTHON LIBRARY FOR MEASURING INFRASTRUCTURE-AS-CODE BLUEPRINTS IN ANSIBLE
S. Dalla Palma, D. Di Nucci, D. A. Tamburri
SoftwareX, 2020, Volume 12, 6 pages

[J8] TOWARD A CATALOG OF SOFTWARE QUALITY METRICS FOR INFRASTRUCTURE CODE
S. Dalla Palma, D. Di Nucci, F. Palomba, D. A. Tamburri
Elsevier Journal of Systems and Software (JSS), 2020, Volume 170, 8 pages.

[J7] A LARGE EMPIRICAL ASSESSMENT OF THE ROLE OF DATA BALANCING IN MACHINE-LEARNING-BASED CODE SMELL DETECTION
F. Pecorelli, D. Di Nucci, C. De Roover, A. De Lucia
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[J6] SCENTED SINCE THE BEGINNING: ON THE DIFFUSENESS OF TEST SMELLS IN AUTOMATICALLY GENERATED TEST CODE

G. Grano, F. Palomba, D. Di Nucci, A. De Lucia, H. Gall
Elsevier Journal of Systems and Software (JSS), 2019, Volume 156, 16 pages, 312-327

[J5] THIRD-PARTY LIBRARIES IN MOBILE APPS WHEN, HOW, AND WHY DEVELOPERS UPDATE THEM
P. Salza, F. Palomba, D. Di Nucci, A. De Lucia, F. Ferrucci
Springer Empirical Software Engineering (EMSE), 2019, Volume 25, 37 pages, 2341-2377

[J4] A TEST CASE PRIORITIZATION GENETIC ALGORITHM GUIDED BY THE HYPERVOLUME INDICATOR
D. Di Nucci, A. Panichella, A. Zaidman, A. De Lucia
IEEE Transactions on Software Engineering (TSE), 2019, Volume 46, Issue 6, 674-696

[J3] ON THE IMPACT OF CODE SMELLS ON THE ENERGY CONSUMPTION OF MOBILE APPLICATIONS
F. Palomba, D. Di Nucci, A. Panichella, A. Zaidman, A. De Lucia
Elsevier Information and Software Technology (INFSOFT), 2019, Volume 105, 13 pages, 43-55

[J2] A DEVELOPER CENTERED BUG PREDICTION MODEL
D. Di Nucci, F. Palomba, G. De Rosa, G. Bavota, R. Oliveto, A. De Lucia
IEEE Transactions on Software Engineering (TSE), 2018, Volume 44 Issue 1, 21 pages, 5-24

[J1] DYNAMIC SELECTION OF CLASSIFIERS IN BUG PREDICTION: AN ADAPTIVE METHOD
D. Di Nucci, F. Palomba, R. Oliveto, A. De Lucia
IEEE Transactions on Emerging Topics in Computational Intelligence (TETCI), 2017, Volume 1, Issue 3, 11 pages, 202-212

CONFERENCE PAPERS, MAIN TRACK

[C14] A MULTIVOCAL LITERATURE REVIEW OF MLOPS TOOLS AND FEATURES
G. Recupito, F. Pecorelli, G. Catolino, S. Moreschini, D. Di Nucci, F. Palomba, D. A. Tamburri
48th Euromicro Conference on Software Engineering and Advanced Applications (Euromicro SEAA 2022)
Maspalomas, Spain, 2022, 8 pages, 84-91

[C13] EXPLOITING DYNAMIC ANALYSIS FOR ARCHITECTURAL SMELL DETECTION: A PRELIMINARY STUDY
I. Pigazzini, D. Di Nucci, F. Arcelli Fontana, M. Belotti
48th Euromicro Conference Series on Software Engineering and Advanced Applications (Euromicro SEAA 2022)
Maspalomas, Spain, 2022, 8 pages, 282-289

[C12] A DELTA-DEBUGGING APPROACH TO ASSESSING THE RESILIENCE OF ACTOR PROGRAMS THROUGH RUN-TIME TEST PERTURBATIONS
J. De Bleser, D. Di Nucci, C. De Roover
1st IEEE/ACM International Conference on Automation of Software Test (AST 2020)
Virtual (originally Seoul, South Korea), 2020, 10 pages, 21-30

[C11] COMPARING HEURISTIC AND MACHINE LEARNING APPROACHES FOR METRIC-BASED CODE SMELL DETECTION
F. Pecorelli, F. Palomba, D. Di Nucci, A. De Lucia
27th IEEE/ACM International Conference on Program Comprehension (ICPC 2019)
Montreal, Canada, 2019, 12 pages, 93-104

[C10] CROSS-PROJECT JUST-IN-TIME BUG PREDICTION FOR MOBILE APPS: AN EMPIRICAL ASSESSMENT
G. Catolino, D. Di Nucci, F. Ferrucci
6th IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft 2019)
Montreal, Canada, 2019, 12 pages, 99-110

[C9] ASSESSING DIFFUSION AND PERCEPTION OF TEST SMELLS IN SCALA PROJECTS
J. De Bleser, D. Di Nucci, C. De Roover
16th IEEE/ACM International Conference on Mining Software Repositories (MSR 2019)
Montreal, Canada, 2019, 11 pages, 457-467

[C8] MINING SCALA FRAMEWORK EXTENSIONS FOR RECOMMENDATION PATTERNS
Y. Pacheco, J. De Bleser, T. Molderez, D. Di Nucci, W. De Meuter, C. De Roover
26th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2018)
Hangzhou, China, 2019, 10 pages, 514-523

[C7] DO DEVELOPERS UPDATE THIRD-PARTY LIBRARIES IN MOBILE APPS?
P. Salza, F. Palomba, D. Di Nucci, C. D'Uva, A. De Lucia, F. Ferrucci
IEEE/ACM 26th International Conference on Program Comprehension (ICPC 2018)
Gothenburg, Sweden, 2018, 11 pages, 255-265

[C6] SELF-REPORTED ACTIVITIES OF ANDROID DEVELOPERS
L. Pascarella, F. Geiger, F. Palomba, D. Di Nucci, I. Malavolta, A. Bacchelli
5th IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft 2018)
Gothenburg, Sweden, 2018, 12 pages, 144-155

[C5] DETECTING CODE SMELLS USING MACHINE LEARNING TECHNIQUES: ARE WE THERE YET?
D. Di Nucci, F. Palomba, D. A. Tamburri, A. Serebrenik, A. De Lucia
25th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2018)
Campobasso, Italy, 2018, 10 pages, 612-621

[C4] SOFTWARE-BASED ENERGY PROFILING OF ANDROID APPS: SIMPLE, EFFICIENT AND RELIABLE?
D. Di Nucci, F. Palomba, A. Prota, A. Panichella, A. Zaidman, A. De Lucia
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Klagenfurt, Austria, 2017, 12 pages, 103-114

[C3] SEARCH-BASED TESTING OF PROCEDURAL PROGRAMS: ITERATIVE SINGLE-TARGET OR MULTI-TARGET APPROACH?
S. Scalabrino, G. Grano, D. Di Nucci, R. Oliveto, A. De Lucia
Symposium on Search-Based Software Engineering (SSBSE 2016)
Raleigh, NC, United States, 2016, 15 pages, 64-79

[C2] ON THE ROLE OF DEVELOPER'S SCATTERED CHANGES IN BUG PREDICTION
D. Di Nucci, F. Palomba, S. Siravo, G. Bavota, R. Oliveto, A. De Lucia
31st IEEE International Conference on Software Maintenance and Evolution (ICSME 2015)
Bremen, Germany, 2015, 10 pages, 241-250

[C1] HYPERVOLUME-BASED SEARCH FOR TEST CASE PRIORITIZATION
D. Di Nucci, A. Panichella, A. Zaidman, A. De Lucia
Symposium on Search-Based Software Engineering (SSBSE 2015)
Bergamo, Italy, 2015, 15 pages, 157-172

CONFERENCE PAPERS, TOOL DEMONSTRATIONS TRACK

[D8] DEFUSE: A DATA ANNOTATOR AND MODEL BUILDER FOR SOFTWARE DEFECT PREDICTION
S. Dalla Palma, D. Di Nucci, D. A. Tamburri
38th IEEE International Conference on Software Maintenance and Evolution (ICSME 2022)
Limassol, Cyprus, 2022, 5 pages, 479-483

[D7] REFACTORING ANDROID-SPECIFIC ENERGY SMELLS: A PLUGIN FOR ANDROID STUDIO
E. Iannone, F. Pecorelli, D. Di Nucci, F. Palomba, A. De Lucia
IEEE/ACM 28th International Conference on Program Comprehension (ICPC 2020)
Virtual (originally Seoul, South Korea), 2020, 5 pages, 451-455

[D6] SOCRATES - SCALA RADAR FOR TEST SMELLS
J. De Bleser, D. Di Nucci, C. De Roover
10th ACM SIGPLAN Scala Symposium (SCALA 2019)
London, United Kingdom, 2019, 5 pages, 22-26

[D5] OCELOT: A SEARCH-BASED TEST-DATA GENERATION TOOL FOR C
S. Scalabrino, G. Grano, D. Di Nucci, M. Guerra, A. De Lucia, H. Gall, R. Oliveto
33rd IEEE/ACM International Conference on Automated Software Engineering (ASE 2018)
Montpellier, France, 2018, 4 pages, 868-871

[D4] A GRAPH-BASED DATASET OF COMMIT HISTORY OF REAL-WORLD ANDROID APPS
F. Geiger, I. Malavolta, L. Pascarella, F. Palomba, D. Di Nucci, A. Bacchelli
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Gothenburg, Sweden, 2018, 5 pages, 30-33

[D3] PETRA: A SOFTWARE-BASED TOOL FOR ESTIMATING THE ENERGY PROFILE OF ANDROID APPLICATIONS
D. Di Nucci, F. Palomba, A. Prota, A. Panichella, A. Zaidman, A. De Lucia
39th IEEE/ACM International Conference on Software Engineering (ICSE 2017)
Buenos Aires, Argentina, 2017, 4 pages, 3-6

[D2] LIGHTWEIGHT DETECTION OF ANDROID-SPECIFIC CODE SMELLS: THE ADOCTOR PROJECT
F. Palomba, D. Di Nucci, A. Panichella, A. Zaidman, A. De Lucia
24th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017)
Klagenfurt, Austria, 2017, 5 pages, 487-491

[D1] LANDFILL: AN OPEN DATASET OF CODE SMELLS WITH PUBLIC EVALUATION
F. Palomba, D. Di Nucci, M. Tufano, G. Bavota, R. Oliveto, D. Poshyvanyk, A. De Lucia
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Florence, Italy, 2015, 4 pages, 482-485

CONFERENCE PAPERS, MISCELLANEOUS TRACKS

[M6] A PRELIMINARY EVALUATION ON THE RELATIONSHIP AMONG ARCHITECTURAL AND TEST SMELLS
M. De Stefano, F. Pecorelli, D. Di Nucci, A. De Lucia
22nd IEEE International Working Conference on Source Code Analysis and Manipulation (SCAM 2022)
New Ideas and Emerging Results Track, Limassol, Cyprus, 2022, 5 pages, 66-70

[M5] TOWARD AUTOMATED EXPLOIT GENERATION FOR KNOWN VULNERABILITIES IN OPEN-SOURCE LIBRARIES
E. Iannone, D. Di Nucci, A. Sabetta, A. De Lucia
29th IEEE/ACM International Conference on Program Comprehension (ICPC 2021)
Early Research Achievement Track, Virtual (originally Madrid, Spain), 2021, 5 pages, 396-400

[M4] COUNTERTERRORISM FOR CYBER-PHYSICAL SPACES: A COMPUTER VISION APPROACH
G. Cascavilla, J. Slabber, F. Palomba, D. Di Nucci, D. A. Tamburri, W.J. van den Heuvel
International Conference on Advanced Visual Interfaces (AVI 2020)
Short Paper, Ischia, Italy, 2020, 5 pages, 1-5

[M3] QUALITY MANAGEMENT OF INFRASTRUCTURE CODE IN SERVERLESS COMPUTING: THE RADON APPROACH
S. Dalla Palma, M. Garriga, D. Di Nucci, D. A. Tamburri, W.J. van den Heuvel
8th European Conference On Service-Oriented And Cloud Computing (ESOCC 2020)
EU Projects Track, Virtual (originally Heraklion, Greece), 2020, 5 pages, 155-160

[M2] MINING PATTERNS IN SOURCE CODE USING TREE MINING ALGORITHMS
H. Son Pham, S. Nijssen, K. Mens, D. Di Nucci, T. Molderez, C. De Roover, J. Fabry, V. Zaytsev.
22nd International Conference on Discovery Science (DS 2019)
Short Paper, Split, Croatia, 2019, 10 pages, 471-480

[M1] METHODS AND TOOLS FOR FOCUSING AND PRIORITIZING THE TESTING EFFORT
D. Di Nucci
34th IEEE International Conference on Software Maintenance and Evolution (ICSME 2018)
Doctoral Symposium Track, Madrid, Spain, 2018, 5 pages, 722-726

PUBLISHED WORKSHOP PAPERS

[W11] PROJECTCODING - APPLIED GAME FOR LEARNING JAVA
G. Annunziata, S. Lambiase, A. Piro, D. Di Nucci, F. Ferrucci
1st Workshop on Artificial Intelligence with and for Learning Sciences: Past, Present, and Future Horizons (WAILS 2024)
Salerno, Italy, 2024, 2 pages, to appear

[W10] TOWARDS QUANTUM-ALGORITHMS-AS-A-SERVICE
M. De Stefano, D. Di Nucci, F. Palomba, D. Taibi, A. De Lucia
1st International Workshop on Quantum Programming for Software Engineering (QP4SE 2022)
Singapore, 2022, 4 pages, 7-10

[W9] DEEPIAC: DEEP LEARNING-BASED LINGUISTIC ANTI-PATTERN DETECTION FOR IAC
N. Borovits, I. Kumara, P. Krishnan, S. Dalla Palma, D. Di Nucci, F. Palomba, D. A. Tamburri, W.-J. van den Heuvel
4th ACM SigSoft International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTeSQuE 2020)
Virtual (originally Sacramento, USA), 2020, 6 pages, 7-12

[W8] SINGLING THE ODD ONES OUT: A NOVELTY DETECTION APPROACH TO FIND DEFECTS IN INFRASTRUCTURE-AS-CODE
S. Dalla Palma, M. Mohammadi, D. Di Nucci, D. A. Tamburri
4th ACM SigSoft International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTeSQuE 2020)
Virtual (originally Sacramento, USA), 2020, 6 pages, 31-36.

[W7] ON THE ROLE OF DATA BALANCING FOR MACHINE LEARNING-BASED CODE SMELL DETECTION
F. Pecorelli, D. Di Nucci, C. De Roover, A. De Lucia
3rd ACM SigSoft International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTeSQuE 2019)
Tallinn, Estonia, 2019, 6 pages, 19-24

[W6] A LANGUAGE-PARAMETRIC MODULAR FRAMEWORK FOR MINING IDIOMATIC CODE PATTERNS
D. Di Nucci, H. Son Pham, J. Fabry, C. De Roover, K. Mens, T. Molderez, S. Nijssen and V. Zaytsev
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Bolzano, Italy, 2019

[W5] MINING EXTENSION POINT PATTERNS IN SCALA
Y. Pacheco, J. De Bleser, T. Molderez, D. Di Nucci, W. De Meuter, C. De Roover
17th Belgium-Netherlands Software Evolution Workshop (BENEVOL 2018)
Delft, The Netherlands, 2018, 5 pages, 16-20

[W4] OMNISCIENT DEVOPS ANALYTICS
D. Tamburri, F. Palomba, D. Di Nucci, L. Di Giacomo
1st International Workshop on Software Engineering Aspects of Continuous Development and New Paradigms of Software Production and Deployment (DEVOPS 2018)
Chateau de Villebrumier, France, 2018, 12 pages, 48-59

[W3] EVALUATING THE ADAPTIVE SELECTION OF CLASSIFIERS FOR CROSS-PROJECT BUG PREDICTION
D. Di Nucci, F. Palomba, A. De Lucia
6th International Workshop on Realizing Artificial Intelligence Synergies in Software Engineering (RAISE 2018)
Gothenburg, Sweden, 2018, 7 pages, 48-54

[W2] THE ROLE OF META-LEARNERS IN THE ADAPTIVE SELECTION OF CLASSIFIERS
D. Di Nucci, A. De Lucia
2nd Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTeSQuE 2018)
Campobasso, Italy, 2018, 6 pages, 7-12

[W1] ON THE DIFFUSION OF TEST SMELLS IN AUTOMATICALLY GENERATED TEST CODE: AN EMPIRICAL STUDY
F. Palomba, D. Di Nucci, A. Panichella, R. Oliveto, A. De Lucia
9th International Workshop on Search-Based Software Testing (SBST 2016)
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Fisciano (SA), January 31st, 2024