

Dario Di Nucci – November 2020

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)	ADDRESS: Uilenburg 5E, 5211 DA 's-Hertogenbosch, The Netherlands PHONE: +39 333 34 03 254 E-MAIL: d.dinucci@uvt.nl WEBSITE: http://dardin88.github.io
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Dario Di Nucci is an assistant professor at the Jheronimus Academy of Data Science, a collaboration between Tilburg University and Eindhoven Technical University. He received the European Ph.D. degree in Management & Information Technology from the University of Salerno in 2018, advised by Prof. Andrea De Lucia with a thesis entitled "*Methods and Tools for Focusing and Prioritizing the Testing Effort*". His research is on *empirical software engineering*, in particular *software maintenance and evolution* and *software testing*. To this aim, he applies several techniques such as *machine learning*, *search-based algorithms*, and *mining* of software repositories. He serves and has served as a program committee member of various international conferences (e.g., ESEC/FSE, ASE, ICSME, SANER, ICPC), and as a referee for various international journals in the field of software engineering (e.g., TSE, TOSEM, EMSE, JSS) and artificial intelligence (e.g., TKDE, Neurocomputing).

EDUCATION

2014/12 – 2018/03	DOCTOR OF PHILOSOPHY (PH.D.) IN MANAGEMENT & INFORMATION TECHNOLOGY University of Salerno, Italy Fully funded by University of Salerno Dissertation titled "Methods and Tools for Focusing and Prioritizing the Testing Effort" advised by prof. Andrea De Lucia
2017/06	13TH INTERNATIONAL SUMMER SCHOOL ON SOFTWARE ENGINEERING (ISSSE) University of Salerno, Italy
2017/03 – 2017/05	VISITING STUDENT Delft University of Technology, The Netherlands Supervision: Prof. Andy Zaidman
2016/05 – 2016/07	VISITING STUDENT Delft University of Technology, The Netherlands Supervision: Prof. Andy Zaidman
2016/06	12TH INTERNATIONAL SUMMER SCHOOL ON SOFTWARE ENGINEERING (ISSSE) University of Salerno, Italy
2015/09	INTERNATIONAL SUMMER SCHOOL ON SOFTWARE ENGINEERING (SE SCHOOL@UNIBZ 2015) Free University of Bolzano, Italy
2013/03	ERASMUS IP HUMAN-MACHINE INTERACTION Reims, France
2011/10 – 2014/09	MASTER'S DEGREE (M.Sc.) IN COMPUTER SCIENCE University of Salerno, Italy 110/110 cum laude Dissertation titled "A defect prediction model based on relationships between developers and modified files" promoted by professor Andrea De Lucia
2007/10 – 2011/05	BACHELOR'S DEGREE (B.Sc.) IN COMPUTER SCIENCE University of Molise, Italy 110/110 cum laude

Dissertation titled "Applications of mathematical models to semantic research" promoted by professor Giovanni Capobianco

EMPLOYMENT HISTORY

01/2020 - ACTUAL	ASSISTANT PROFESSOR Jheronimus Academy of Data Science, Tilburg University, The Netherlands
2018/12 – 2020/06	POST-DOCTORAL LECTURER Vrije Universiteit Brussel, Belgium
2018/01 – 2019/12	POST-DOCTORAL RESEARCHER Vrije Universiteit Brussel, Belgium <i>FWO EOS project "SECO-ASSIST: Automated Assistance for Developing Software in Ecosystems of the Future" - https://secoassist.github.io/</i> <i>Innoviris TeampUP project "INTiMALS INTElligent Modernisation Assistance for Legacy Software" - http://soft.vub.ac.be/intimals/</i>
2014/12 – 2018/03	PH.D. STUDENT IN MANAGEMENT & INFORMATION TECHNOLOGY University of Salerno, Italy Fully funded by University of Salerno. Advisor: Prof. Andrea De Lucia

TEACHING

INTRODUCTION TO MACHINE LEARNING (mandatory course of the Pre-Master's in Data Science and Entrepreneurship)
Jheronimus Academy of Data Science (University of Tilburg, Eindhoven University of Technology), The Netherlands
Course coordinator (lecturer: Prof. Damian A. Tamburri)
Spring 2021

DATA ENGINEERING (mandatory course of the Master's in Data Science and Entrepreneurship)
Jheronimus Academy of Data Science, (University of Tilburg, Eindhoven University of Technology), The Netherlands
Lecturer (course coordinator: Prof. Damian A. Tamburri)
Fall 2020

INTRODUCTION TO MACHINE LEARNING (mandatory course of the Pre-Master's in Data Science and Entrepreneurship)
Jheronimus Academy of Data Science, (University of Tilburg, Eindhoven University of Technology), The Netherlands
Lecturer (course coordinator: Prof. Damian A. Tamburri)
Spring 2020

DATA STATISTICS (mandatory course of the Bachelor in Data Science)
University of Tilburg, Eindhoven University of Technology, The Netherlands
Lecturer (course coordinator: Prof. Maurits C. Kaptein)
Fall 2019

CAPITA SELECTA OF SOFTWARE ENGINEERING (elective course of the Master's in Computer Science)
Vrije Universiteit Brussel, Belgium
Lecturer (course coordinator: Prof. Coen De Roover)
2019-2020 (annual course), 2018-2019 (annual course)

SOFTWARE ENGINEERING, MANAGEMENT AND EVOLUTION (mandatory course of the Master's in Computer Science)
University of Salerno, Italy
Teaching assistant (holder: Prof. Andrea De Lucia)
Spring 2017, Spring 2016

SOFTWARE ENGINEERING (mandatory course of the Bachelor in Computer Science)
University of Salerno, Italy
Teaching assistant (holder: Prof. Andrea De Lucia)
Fall 2016, Fall 2015

WEB DEVELOPMENT (mandatory course in the Bachelor of Computer Science)
University of Salerno, Italy
Teaching assistant
Fall 2016

PROGRAMMING I (mandatory course in the Bachelor of Computer Science)
University of Salerno, Italy
Teaching assistant
Fall 2016 (holder: Prof. Riccardo Di Stasi), Fall 2015 (holder: Prof. Enrico Fischetti)

SOFTWARE ENGINEERING: MAINTENANCE AND TESTING (mandatory course of the Master's in Computer Science)
University of Salerno, Italy
Teaching assistant (holder: Prof. Andrea De Lucia)
Fall 2015

SUPERVISION OF PH.D. THESES - GRADUATED, ADVISED:

2020	[PT1] AN AUTOMATED DELTA-DEBUGGING APPROACH TO RESILIENCE TESTING OF ACTOR SYSTEMS THROUGH FAULT INJECTION Student: Jonas De Bleser – Ph.D. in Computer Science – Promotor: Prof. Coen De Roover
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SUPERVISION OF MASTER'S THESES - GRADUATED, ADVISED:

- 2020**
- [MT8] SOURCE CODE MEASUREMENTS FOR MACHINE LEARNING-BASED SMELL DETECTION IN INFRASTRUCTURE AS CODE: A TOSCA CASE-STUDY**
Student: Chiel van Asseldonk – M.Sc. in Data Science and Entrepreneurship – Promotor: Prof. Damian A. Tamburri
- [MT7] MEASURING COMPETITIVENESS BASED ON INSTAGRAM FOLLOWER COMMUNICATION**
Student: Niels van Gorsel – M.Sc. in Data Science and Entrepreneurship – Promotor: Prof. Shantanu Mullick
- [MT6] HEURISTIC-GUIDED RESILIENCE TESTING OF PERSISTENT ACTOR IMPLEMENTATIONS**
Student: Patrick Muriuki Gakuo – M.Sc. in Computer Science – Promotor: Prof. Coen De Roover
- 2016**
- [MT5] CHECKAPP: A TOOL FOR MONITORING JAVA APPLICATION PERFORMANCE**
Student: Elisa D'Eugenio – M.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia
- [MT4] PETRA: A POWER ESTIMATION TOOL FOR ANDROID APPLICATIONS**
Student: Antonio Prota – M.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia
- 2015**
- [MT3] DEVELOPMENT AND COMPARISON OF NOVEL TECHNIQUES FOR SEARCH BASED TEST DATA GENERATION**
Student: Giovanni Grano – M.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia
- [MT2] DESIGN AND DEVELOPMENT OF A TOOL FOR THE AUTOMATIC GENERATION OF TEST CASES**
Student: Simone Scalabrino – M.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia
- [MT1] A COMBINED MODEL FOR THE PREDICTION OF DEFECTS**
Student: Giuseppe De Rosa – M.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia

SUPERVISION OF BACHELOR THESES - GRADUATED, ADVISED:

- 2017**
- [BT9] DESIGN AND DEVELOPMENT OF METHODS FOR TEST CASE MINIMIZATION**
Student: Francesco De Feo – B.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia
- [BT8] DESIGN AND DEVELOPMENT OF METHODS FOR TEST CASE PRIORITIZATION**
Student: Giuseppe Sessa – B.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia
- [BT7] DESIGN AND DEVELOPMENT OF A PLUGIN FOR OPTIMIZING REGRESSION TESTING**
Student: Gerardo Della Monica – B.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia
- [BT6] DESIGN AND DEVELOPMENT OF A PLUGIN FOR THE DETECTION OF ENERGY DEFECTS OF MOBILE APPLICATIONS**
Student: Sara Zaino – B.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia
- [BT5] DESIGN AND DEVELOPMENT OF A DEFECT PREDICTION TOOL**
Student: Giuseppina Tufano – B.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia
- [BT4] DEVELOPMENT OF A SOFTWARE ENERGY ESTIMATION METHODOLOGY IN AN INTEGRATED DEVELOPMENT ENVIRONMENT**
Student: Roberto Contaldo – B.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia
- [BT3] DESIGN AND DEVELOPMENT OF A DEFECT PREDICTION TOOL BY USING CROSS-PROJECT TECHNIQUES**
Student: Pasquale Martiniello – B.Sc. in Computer Science – Advisor: Prof. Andrea De Lucia
- 2016**
- [BT2] TRIO: A TOOL FOR REGRESSION TESTING OPTIMIZATION**
Student: Antonio Luca D'Avanzo – B.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia
- [BT1] DESIGN AND DEVELOPMENT OF A DEFECT PREDICTION TOOL**

Student: Fabiano Pecorelli – B.Sc. in Computer Science – Promotor: Prof. Andrea De Lucia

ACADEMIC RECORD

Journal Articles: 10

Conference Papers: 12 (main track), 7 (tool demonstration track), 5 (miscellaneous tracks), Workshop Papers: 9

Citations: 575, h-index: 14, <https://scholar.google.it/citations?user=YJqcbnIAAAJ&hl=it>

1. JOURNAL PAPERS

[J10] S. Dalla Palma, D. Di Nucci, D. A. Tamburri

AnsibleMetrics: A Python library for measuring Infrastructure-as-Code blueprints in Ansible
SoftwareX, 2020, Volume 12, 6 pages, 1-6

[J9] M. Vandercammen, L. Christophe, D. Di Nucci, W. De Meuter, C. De Roover

Prioritising Server Side Reachability via Inter-process Concolic Testing
The Art, Science, and Engineering of Programming, 2020, Volume 5, Issue 2, 34 pages, to appear.

[J8] S. Dalla Palma, D. Di Nucci, F. Palomba, D. A. Tamburri

Toward a Catalog of Software Quality Metrics for Infrastructure Code
Elsevier Journal of Systems and Software (JSS), 2020, Volume 170, 8 pages, 1 - 8.

[J7] F. Pecorelli, D. Di Nucci, C. De Roover, A. De Lucia

A Large Empirical Assessment of the Role of Data Balancing in Machine-Learning-based Code Smell Detection
Elsevier Journal of Systems and Software (JSS), 2020, Volume 169, 16 pages, 1 - 16.

[J6] 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 Journal of Systems and Software (JSS), 2019, Volume 156, 16 pages, 312 - 327.

[J5] 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 Empirical Software Engineering (EMSE), 2019, Volume 25, 37 pages, 2341 - 2377.

[J4] D. Di Nucci, A. Panichella, A. Zaidman, A. De Lucia

A Test Case Prioritization Genetic Algorithm guided by the Hypervolume Indicator
IEEE Transactions on Software Engineering (TSE), 2019, Volume 46, Issue 6, 674 - 696.

[J3] F. Palomba, D. Di Nucci, A. Panichella, A. Zaidman, A. De Lucia

On the Impact of Code Smells on the Energy Consumption of Mobile Applications
Elsevier Information and Software Technology (INFOSOFTE), 2019, Volume 105, 13 pages, 43 - 55.

[J2] 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), 2018, Volume 44 Issue 1, 21 pages, 5 - 24.

[J1] D. Di Nucci, F. Palomba, R. Oliveto, A. De Lucia

Dynamic Selection of Classifiers in Bug Prediction: an Adaptive Method
IEEE Transactions on Emerging Topics in Computational Intelligence (TETCI), 2017, Volume 1, Issue 3, 11 pages, 202 - 212.

2. CONFERENCE PAPERS, MAIN TRACK (I.E., FORMALLY PUBLISHED IN INTERNATIONAL CONFERENCE PROCEEDINGS WITH PEER REVIEW)

[C12] J. De Bleser, D. Di Nucci, C. De Roover

A Delta-Debugging Approach to Assessing the Resilience of Actor Programs through Run-time Test Perturbations
In Proceedings of the 1st IEEE/ACM International Conference on Automation of Software Test (AST 2020), Virtual (originally Seoul, South Korea), 2020, 10 pages, 21-30.

- [C11] F. Pecorelli, F. Palomba, D. Di Nucci, A. De Lucia
Comparing Heuristic and Machine Learning Approaches for Metric-Based Code Smell Detection
In Proceedings of the 27th IEEE/ACM International Conference on Program Comprehension (ICPC 2019), Montreal, Canada, 2019, 12 pages, 93 - 104.
- [C10] G. Catolino, D. Di Nucci, F. Ferrucci
Cross-Project Just-in-Time Bug Prediction for Mobile Apps: An Empirical Assessment
In Proceedings of the 6th IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft 2019), Montreal, Canada, 2019, 12 pages, 99 - 110.
- [C9] J. De Bleser, D. Di Nucci, C. De Roover
Assessing Diffusion and Perception of Test Smells in Scala Projects
In Proceedings of the 16th IEEE/ACM International Conference on Mining Software Repositories (MSR 2019) – Montreal, Canada, 2019, 11 pages, 457 - 467.
- [C8] Y. Pacheco, J. De Bleser, T. Molderez, D. Di Nucci, W. De Meuter, C. De Roover
Mining Scala Framework Extensions for Recommendation Patterns
In Proceedings of the 26th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2018), Hangzhou, China, 2019, 10 pages, 514 - 523.
- [C7] 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 IEEE/ACM 26th International Conference on Program Comprehension (ICPC 2018), Gothenburg, Sweden, 2018, 11 pages, 255 - 265.
- [C6] L. Pascarella, F. Geiger, F. Palomba, D. Di Nucci, I. Malavolta, A. Bacchelli
Self-Reported Activities of Android Developers
In Proceedings of the 5th IEEE/ACM International Conference on Mobile Software Engineering and Systems (MOBILESoft 2018), Gothenburg, Sweden, 2018, 12 pages, 144 - 155.
- [C5] 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 25th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2018), Campobasso, Italy, 2018, 10 pages, 612 - 621.
- [C4] D. Di Nucci, F. Palomba, A. Prota, A. Panichella, A. Zaidman, A. De Lucia
Software-Based Energy Profiling of Android Apps: Simple, Efficient and Reliable?
In Proceedings of the 24th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017), Klagenfurt, Austria, 2017, 12 pages, 103-114
- [C3] S. Scalabrino, G. Grano, D. Di Nucci, R. Oliveto, A. De Lucia
Search-based Testing of Procedural Programs: Iterative Single-Target or Multi-Target Approach?
In Proceedings of the Symposium on Search-Based Software Engineering (SSBSE 2016), Raleigh, NC, United States, 2016, 15 pages, 64 – 79
- [C2] 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 31st IEEE International Conference on Software Maintenance and Evolution (ICSME 2015) - Bremen, Germany, 2015, 10 pages, 241-250
- [C1] D. Di Nucci, A. Panichella, A. Zaidman, A. De Lucia
Hypervolume-based Search for Test Case Prioritization
In Proceedings of the Symposium on Search-Based Software Engineering (SSBSE 2015) - Bergamo, Italy, 2015, 15 pages, 157-172

3. CONFERENCE PAPERS, TOOL DEMONSTRATIONS TRACK (I.E., FORMALLY PUBLISHED IN INTERNATIONAL CONFERENCE PROCEEDINGS WITH PEER REVIEW)

- [D7] E. Iannone, F. Pecorelli, D. Di Nucci, F. Palomba, A. De Lucia
Refactoring Android-specific Energy Smells: A Plugin for Android Studio
In Proceedings of the IEEE/ACM 28th International Conference on Program Comprehension (ICPC 2020), Virtual (originally Seoul, South Korea), 2020, 5 pages, 451-455.

- [D6] J. De Bleser, D. Di Nucci, C. De Roover
SoCRATES - Scala Radar for Test Smells
In Proceeding of the 10th ACM SIGPLAN Scala Symposium (SCALA 2019) - Tool Paper, London, United Kingdom, 2019, 5 pages, 22 - 26
- [D5] S. Scalabrino, G. Grano, D. Di Nucci, M. Guerra, A. De Lucia, H. Gall, R. Oliveto
OCELOT: a Search-Based Test-Data Generation Tool for C
In Proceeding of the 33rd IEEE/ACM International Conference on Automated Software Engineering (ASE 2018), Montpellier, France, 2018, 4 pages, 868 - 871.
- [D4] F. Geiger, I. Malavolta, L. Pascarella, F. Palomba, D. Di Nucci, A. Bacchelli
A Graph-based Dataset of Commit History of Real-World Android apps
In Proceedings of the IEEE/ACM 15th International Conference on Mining Software Repositories (MSR 2018), Gothenburg, Sweden, 2018, 5 pages, 30 - 33.
- [D3] D. Di Nucci, F. Palomba, A. Prota, A. Panichella, A. Zaidman, A. De Lucia
PETrA: a Software-Based Tool for Estimating the Energy Profile of Android Applications
In Proceedings of the 39th IEEE/ACM International Conference on Software Engineering (ICSE 2017) - Buenos Aires, Argentina, 2017, 4 pages, 3-6.
- [D2] 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 24th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER 2017) - Tool Track, Klagenfurt, Austria, 2017, 5 pages, 487-491
- [D1] 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 IEEE/ACM 12th Working Conference on Mining Software Repositories (MSR 2015) - Florence, Italy, 2015, 4 pages, 482-485

4. CONFERENCE PAPERS, MISCELLANEOUS TRACKS (I.E., FORMALLY PUBLISHED IN INTERNATIONAL CONFERENCE PROCEEDINGS WITH PEER REVIEW)

- [M5] 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 36th IEEE International Conference on Software Maintenance and Evolution (ICSME 2020), Virtual (originally Melbourne, Australia), 2020, 2 pages, 857-861.
- [M4] G. Cascavilla, J. Slabber, F. Palomba, D. Di Nucci, D. A. Tamburri, W.J. van den Heuvel
Counterterrorism for Cyber-Physical Spaces: A Computer Vision Approach
In Proceedings of the International Conference on Advanced Visual Interfaces (AVI 2020), Ischia, Italy, 2020, 5 pages, 1-5.
- [M3] S. Dalla Palma, M. Garriga, D. Di Nucci, D. A. Tamburri, W.J. van den Heuvel
Quality Management of Infrastructure Code in Serverless Computing: The RADON Approach
In Proceedings of the 8th European Conference On Service-Oriented And Cloud Computing (ESOCC 2020), Virtual (originally Heraklion, Greece), 2020, 5 pages, to appear.
- [M2] H. Son Pham, S. Nijssen, K. Mens, D. Di Nucci, T. Molderez, C. De Roover, J. Fabry, V. Zaytsev.
Mining Patterns in Source Code using Tree Mining Algorithms
In Proceedings of the 22nd International Conference on Discovery Science (DS 2019), Split, Croatia, 2019, 10 pages, 471-480.
- [M1] D. Di Nucci
Methods and Tools for Focusing and Prioritizing the Testing Effort
In Proceeding of the 34th IEEE International Conference on Software Maintenance and Evolution (ICSME 2018) - Doctoral Symposium Track, Madrid, Spain, 2018, 5 pages, 722 - 726.

5. PUBLISHED WORKSHOP PAPERS (I.E., FORMALLY PUBLISHED IN INTERNATIONAL WORKSHOP PROCEEDINGS WITH PEER REVIEW)

- [W9] N. Borovits, I. Kumara, P. Krishnan, S. Dalla Palma, D. Di Nucci, F. Palomba, D. A. Tamburri, W.J. van den Heuvel
DeepLaC: Deep Learning-based Linguistic Anti-Pattern Detection for IaC
In Proceeding of the 4th ACM SigSoft International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTaSQuE 2020), Virtual (originally Sacramento, USA), 2020, 6 pages, 7-12.
- [W8] S. Dalla Palma, M. Mohammadi, D. Di Nucci, D. A. Tamburri
Singling the Odd Ones Out: A Novelty Detection Approach to Find Defects in Infrastructure-as-Code
In Proceeding of the 4th ACM SigSoft International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTaSQuE 2020), Virtual (originally Sacramento, USA), 2020, 6 pages, 31-36.
- [W7] F. Pecorelli, D. Di Nucci, C. De Roover, A. De Lucia
On the Role of Data Balancing for Machine Learning-based Code Smell Detection
In Proceeding of the 3rd ACM SigSoft International Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTaSQuE 2019), Tallinn, Estonia, 2019, 6 pages, 19 - 24.
- [W6] D. Di Nucci, H. Son Pham, J. Fabry, C. De Roover, K. Mens, T. Molderez, S. Nijssen and V. Zaytsev
A Language-Parametric Modular Framework for Mining Idiomatic Code Patterns
In Proceedings of the 12th Seminar Series on Advanced Techniques & Tools for Software Evolution (SATTOSSE 2019), Bolzano, Italy, 2019
- [W5] Y. Pacheco, J. De Bleser, T. Molderez, D. Di Nucci, W. De Meuter, C. De Roover
Mining Extension Point Patterns in Scala
In Proceedings of the 17th Belgium-Netherlands Software Evolution Workshop (BENEVOL 2018), Delft, The Netherlands, 2018, 5 pages, 16 - 20.
- [W4] D. Tamburri, F. Palomba, D. Di Nucci, L. Di Giacomo
Omniscient DevOps Analytics
In Proceedings of the 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] D. Di Nucci, F. Palomba, A. De Lucia
Evaluating the Adaptive Selection of Classifiers for Cross-Project Bug Prediction
In Proceedings of the 6th International Workshop on Realizing Artificial Intelligence Synergies in Software Engineering (RAISE 2018), Gothenburg, Sweden, 2018, 7 pages, 48 - 54.
- [W2] D. Di Nucci, A. De Lucia
The Role of Meta-Learners in the Adaptive Selection of Classifiers
In Proceeding of the 2nd Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTaSQuE 2018), Campobasso, Italy, 2018, 6 pages, 7 - 12.
- [W1] 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 9th International Workshop on Search-Based Software Testing (SBST 2016) - Austin, TX, United States, 2016, 10 pages, 5-14
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INVITED TALKS

- 2020** **[T6] IMPROVING ENERGY EFFICIENCY OF MOBILE APPLICATIONS IN THE INTERNET OF THINGS**
University of Salerno, Fisciano, Italy, June 3rd, 2020
- [T5] DEFECT PREDICTION: USING MACHINE LEARNING FOR FOCUSING THE TESTING EFFORT**
University of Salerno, Fisciano, Italy, 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**
Jheronimus Academy of Data Science, 's-Hertogenbosch, The Netherlands, March 9th, 2018
- 2017** **[T2] DEFECT PREDICTION: USING MACHINE LEARNING FOR FOCUSING THE TESTING EFFORT**
Jheronimus Academy of Data Science, 's-Hertogenbosch, The Netherlands, December 5th, 2017
- [T1] DIAGNOSE AND DETECT ENERGY FLAWS OF ANDROID APPS**
Vrije Universiteit Brussel, Brussels, Belgium. March 23rd, 2017

SERVICE TO THE SCIENTIFIC COMMUNITY

ORGANIZATION OF EVENTS

- 2021** **TOOL DEMO CO-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 CO-CHAIR**
28th IEEE/ACM International Conference on Program Comprehension (ICPC), Virtual (originally Seoul, South Korea)
- PROGRAM CHAIR**
1st Workshop on ENgineering Intelligent Applications' Code (ENIAC), Virtual (originally Porto, Portugal)
- 2019** **ORGANIZER**
18th Belgium-Netherlands Software Evolution Workshop (BENEVOL), Brussels, Belgium
- COMMITTEE MEMBER**
14th International Summer School on Software Engineering (ISSSE), University of Salerno, Italy
- 2017** **SCIENTIFIC SECRETARIAT**
13th International Summer School on Software Engineering (ISSSE), University of Salerno, Italy
- 2016** **SCIENTIFIC SECRETARIAT**
12th International Summer School on Software Engineering (ISSSE), University of Salerno, Italy

PH.D. JURY COMMITTEE MEMBERSHIP

2020 **INVESTIGATING PERFORMANCE ISSUES IN MOBILE APPS**
Teerath Das. Gran Sasso Science Institute (IT)
promoted by Prof. Massimiliano Di Penta and Dr. Ivano Malavolta

PROGRAM COMMITTEE MEMBER OF INTERNATIONAL CONFERENCES

2021 28th IEEE International Conference on Software Analysis, Evolution, and Reengineering (SANER) -
Research Track, Reproducibility Studies and Negative Results Track, Tool Demo Track

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

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 - 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) - Artefact Evaluation Track

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

5th International Conference on Advances and Trends in Software Engineering (SOFTENG)

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

2021 4th International Workshop on Software Health (SoHeal)

2020 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	1 st International Workshop on Cloud-Native Applications Design and Experience (CNAX)
	2 nd Workshop on Machine Learning Techniques for Software Quality Evaluation (MaLTeSQuE)
	10 th International Conference on Advances in System Testing and Validation Lifecycle (VALID)
2017	9 th International Conference on Advances in System Testing and Validation Lifecycle (VALID)

EDITORIAL BOARD MEMBER OF INTERNATIONAL JOURNALS AND BLOG

2020 - ACTUAL	Guest Editor for Science of Computer Programming (SCICO) for a Special Issue on "Software Health of Software Ecosystems"
2020 - ACTUAL	IEEE Software Initiatives Team
2019 - ACTUAL	IEEE Software Blog

REVIEWER

INTERNATIONAL JOURNALS	Advances in Software Engineering - Elsevier
	Applied Soft Computing - Elsevier
	Computational Intelligence - Wiley
	Empirical Software Engineering - Springer
	IEEE Access - IEEE
	IET Software - Institution of Engineering and Technology
	Information Processing Letters - Elsevier
	Journal of Software: Evolution and Process - Wiley
	Journal of Systems and Software - Elsevier
	Neurocomputing - Elsevier
	Science of Computer Programming - Elsevier
	Scientific Programming - Hidawi
	Software Quality Journal - Springer
	Transactions on Knowledge and Data Engineering - IEEE
	Transactions on Software Engineering - IEEE
	Transactions on Software Engineering and Methodology - ACM
INTERNATIONAL CONFERENCES	International Conference on Evaluation and Assessment in Software Engineering: 2020
	IEEE International Conference on Software Analysis, Evolution, and Reengineering: 2017, 2018
	IEEE International Conference on Program Comprehension: 2016, 2019
	IEEE International Conference on Software Maintenance and Evolution: 2016 (New Ideas and Emerging Results Track), 2018, 2019, 2020
	International Conference on Business Information Systems: 2015, 2016
	International Conference on Distributed Multimedia Systems: 2015, 2016
	International Conference on Enterprise Information Systems: 2015, 2016, 2017
	International Conference on Mining Software Repositories: 2019

LICENSES AND CERTIFICATIONS

2020	ABILITAZIONE SCIENTIFICA NAZIONALE - SETTORE CONCURSUALE 01/B1 – INFORMATICA - FASCIA II Issued by Italian Ministry of University and Research. Valid from 23/11/2020 to 23/11/2029
2020	ABILITAZIONE SCIENTIFICA NAZIONALE - SETTORE CONCURSUALE 09/H1 - SISTEMI DI ELABORAZIONE DELLE INFORMAZIONI - FASCIA II Issued by Italian Ministry of University and Research. Valid from 13/11/2020 to 13/11/2029

2014 **ABILITAZIONE ALLA PROFESSIONE DI INGEGNERE**
Issued in December 2014

AWARDS

2020 **BEST REVIEWER AWARD 2019**
Journal of Systems and Software, 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