Dario Di Nucci

Short Resume – 02th February, 2017

1 PERSONAL INFORMATION

NAME: Dario Di Nucci
DATE OF BIRTH: 3rd September, 1988
PLACE OF BIRTH: Isernia, Italy

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2 EDUCATION

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
2014/12 - Actual	**SECOND YEAR DOCTOR OF PHILOSOPHY (PH.D.) PROGRAM IN MANAGEMENT & INFORMATION TECHNOLOGY** *University of Salerno, Italy* Fully funded by University of Salerno. Advisor: Prof. Andrea De Lucia
2013/03 – 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
2007/10 – 2011/05	**BACHELOR'S DEGREE (B.SC.) IN COMPUTER SCIENCE** *University of Salerno, Italy* 110/110 cum laude

3 CERTIFICATIONS

2014	**PROFESSIONAL PRACTICE EXAMINATION FOR THE ENGINEERING LICENSE**
2006	**PRELIMINARY ENGLISH TEST (PET)**

4 RESEARCH INTERESTS

My research activities are mainly focused on maintenance and testing of software systems. In details my research interest are:

- **SEARCH BASED SOFTWARE TESTING.** Software testing is an expensive activity essential in the development of software. For these reasons, over time, many researches have been made in order to further automate this stage. Software testing

techniques based on research use meta-heuristic optimization techniques, such as genetic algorithms, in order to address problems involving the steps of the software testing, and verification and validation of the domain.

- **MINING SOFTWARE REPOSITORY.** Software repositories such as source code control systems, communications stored between project staff and monitoring systems of the defects are used to improve the management of the progress of software projects. The purpose of this branch of research is to find out how to obtain information in order to help understand the development and evolution software processes, support forecasts on software development, and plan future developments.

- **EMPIRICAL SOFTWARE ENGINEERING.** Empirical software engineering is a subdomain of software related to experiments on systems software (software products, processes and resources). This branch includes the design of experiments on software, the collection of the results, and the consequent development of laws and theories.

5 PROFESSIONAL ACTIVITIES

5.1 ORGANIZATION COMMITTEE PARTICIPATION

2016	**SCIENTIFIC SECRETARIAT** *12th International Summer School on Software Engineering, University of Salerno, Italy*
2015	**STUDENT VOLUNTEER** *37th International Conference on Software Engineering, Florence, Italy*
2014	**STUDENT VOLUNTEER** *GUADEC 2014, the GNOME Conference, Strasbourg, France* **STUDENT VOLUNTEER** *11th International Summer School on Software Engineering, University of Salerno, Italy*
2013	**STUDENT VOLUNTEER** *10th International Summer School on Software Engineering, University of Salerno, Italy*

5.2 REVIEWER

INTERNATIONAL JOURNALS	*Journal of Software: Evolution and Process* *Advances in Software Engineering*
INTERNATIONAL CONFERENCES	*IEEE International Conference on Software Analysis, Evolution, and Reengineering: 2017* *IEEE International Conference on Program Comprehension: 2016* *IEEE International Conference on Software Maintenance and Evolution: 2016 (ERA Track)* *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*

5.3 TEACHING

SOFTWARE ENGINEERING	*Assessment of projects and laboratory experimentation.* *Several talks on collaborative tools for managing software artefacts, the UML modelling tools, and software design for the web.*
ADVANCED SOFTWARE	*Assessment of projects and laboratory experimentation.*

ENGINEERING	*Several talks on regression testing optimization, and search-based test case generation.*
PROGRAMMING I	*Student-to-student tutoring*
WEB DEVELOPMENT	*Student-to-student tutoring*

6 PUBLICATIONS

6.1 INTERNATIONAL CONFERENCES

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 International Conference on Software Engineering (ICSE 2017) – Demonstrations Track, Buenos Aires, Argentina, 2017, 4 pages, to appear.

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

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

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

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

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 International Conference on Software Maintenance and Evolution (ICSME 2015) - Bremen, Germany, 2015, 10 pages, 241-250

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

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

6.2 International Journals

D. Di Nucci, F. Palomba, G. De Rosa, G. Bavota, R. Oliveto, A. De Lucia.
A Developer Centered Bug Prediction Model.
Transactions on Software Engineering (TSE), to appear.