

## List of publications

### Journals

Mirandola R., Potena P., Riccobene E., Scandurra, P.: "A reliability model for Service Component Architectures". *Journal of Systems and Software* (Elsevier). *Accepted for publication*. Online Available: <http://dx.doi.org/10.1016/j.jss.2013.11.002>.

Mirandola, R., Potena, P., Scandurra, P.: "Adaptation space exploration for service-oriented Applications". *Science of Computer Programming* (Elsevier), 80, Part B(0):356- 384, 2014. Online Available: <http://dx.doi.org/10.1016/j.scico.2013.09.017>.

Potena, P.: "Optimization of adaptation plans for a service-oriented architecture with cost, reliability, availability and performance tradeoff", *Journal of Systems and Software* (Elsevier), Vol. 86, Issue 3, March 2013, pp. 624-648, ISSN 0164-1212, DOI: 10.1016/j.jss.2012.10.929.

Mirandola R., Potena, P.: "A QoS-based framework for the adaptation of service-based systems", *Journal of Scalable Computing: Practice and Experience, Scientific International Journal for Parallel and Distributed Computing*, Vol. 12, Num. 1, pp. 63–78, ISSN 1895-1767, 2011.

Cortellessa, V., Crnkovic, I., Marinelli, F., Potena, P.: "Experimenting the Automated Selection of COTS Components Based on Cost and System Requirements", *Journal of Universal Computer Science*, vol. 14, no. 8 (2008), pp. 1228-1255. DOI:10.3217/jucs-014-08-1228.

Cortellessa, V., Marinelli, F., Potena, P.: "An optimization framework for "build-or-buy" decisions in software architecture", *Computers and Operations Research*, Elsevier Science, Vol. 35, Issue 10, October 2008, pp. 3090-3106. ISSN 0305-0548. DOI: 10.1016/j.cor.2007.01.011.

### Conferences

Cortellessa, V., Marinelli, F., Mirandola, R., Potena, P.: "Quantifying the influence of failure repair/mitigation costs on Service based Systems", 24th IEEE International Symposium on Software Reliability Engineering (ISSRE 2013), Pasadena, CA, USA. *Accepted for publication*.

Riccobene E., Potena P., Scandurra P.: "Reliability prediction for Service Component Architectures with the SCA-ASM component model". *Proc. of the 38th Euromicro Conference on Software Engineering and Advanced Applications (EUROMICRO-SEAA 2012)*, IEEE, pp. 125-132, ISBN: 978-1-4673-2451-9, DOI: 10.1109/SEAA.2012.53, Cesme, Izmir, Turkey.

Mirandola R., Potena P., Scandurra P.: "A Reliability Prediction Method for Abstract State Machines". *Proc. of the 3rd International ABZ 2012 Conference Abstract State Machines (ASM)*, Alloy, B, VDM, Z, Springer, LNCS, pp. 336-340, ISBN: 978-3-642-30884-0.

Scandurra P., Raibulet, C., Potena P., Mirandola R., Capilla R.: "Adapting cloud-based applications through a coordinated and optimized resource allocation approach". *Proc. of the 2nd International Conference on Cloud Computing and Services Science (CLOSER 2012)*, pp. 355-364, ISBN: 978-989-8565-05-1, Porto, Portugal.

Scandurra P., Raibulet, C., Potena P., Mirandola R., Capilla R.: "A layered coordination framework for optimizing resource allocation in adapting cloud-based applications", *Proc. of the 27th Symposium On Applied Computing (SAC 2012)*, ACM, pp. 471-472, ISBN: 978-1-4503-0857-1.

Mirandola R., Potena P., Scandurra P.: "An Optimization Process for Adaptation Space Exploration of Service-oriented Applications", *Proc. of the 6<sup>th</sup> IEEE International Symposium on Service-Oriented System Engineering (SOSE 2011)*, pp. 146-151, ISBN: 978-1-4673-0411-5, DOI: 10.1109/SOSE.2011.6139103, Irvine, CA, USA.

Mirandola, R., Potena, P., Riccobene, E., Scandurra, P.: "A Framework for Adapting Service-oriented Applications based on Functional/Extra-functional Requirements Tradeoffs", *Proc. of the Sixth International Conference on Software Engineering Advances*, pp. 118-123, ISBN: 978-1-61208-165-6, Barcelona, Spain, 2011.

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Mirandola R., Potena, P.: "Self-adaptation of service based systems based on cost/quality attributes tradeoffs". *Proc. of the 12th International Symposium on Symbolic and Numeric Algorithms for Scientific Computing (SYNACS 2010)*. IEEE Computer Society, pp. 493-501, ISBN: 978-0-7695-4324-6, Timisoara, Romania, 2010.

Cortellessa, V., Mirandola, R., Potena, P.: "Selecting Optimal Maintenance Plans based on Cost/Reliability Tradeoffs for Software Subject to Structural and Behavioral Changes". *Proc. of the 14th European Conference on Software Maintenance and Reengineering (CSMR 2010)*, IEEE, pp. 21-30, Print ISBN: 978-1-61284-369-8, DOI= 10.1109/CSMR.2010.15, Madrid, Spain, 2010.

Cortellessa, V., Potena, P.: "How can optimization models support the maintenance of component-based software?", *Proc. of 1<sup>st</sup> International Symposium on Search Based Software Engineering (SSBSE 2009)*, IEEE, pp.97-100, ISBN: 978-0-7695-3675-0, DOI=10.1109/SSBSE.2009.22, Cumberland Lodge, Windsor, UK, 2009.

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Potena P.: "Composition and tradeoff of non-functional attributes in software systems: research directions" (doctoral symposium), *Proc. of the 6th joint meeting of the European Software Engineering Conference (ESEC) and the ACM SIGSOFT symposium on Foundations of Software Engineering (FSE), Companion Papers*. ESEC-FSE companion '07, ACM, pp. 583 – 586, ISBN: 978-1-59593-811-4, DOI=10.1145/1287624.1287716, Cavtat near Dubrovnik, Croatia, September 03 - 07, 2007.

Cortellessa, V., Potena, P.: "Path-Based Error Propagation Analysis in Composition of Software Services", *Proc. of the 6th International Symposium, Software Composition 2007 (ETAPS 2007)*, Lecture Notes In Computer Science. Springer-Verlag, Berlin, Heidelberg, Vol. 4829/2007, pp. 97-112, ISSN 0302-9743, DOI: 10.1007/978-3-540-77351-1\_8, Braga (Portugal), March 24 - April 1, 2007.

Cortellessa, V., Marinelli, F., Potena, P.: "Automated Selection of Software Components Based on Cost/Reliability Tradeoff", *Proc. of 3rd European Workshop on Software Architecture (EWSA 2006)*, Lecture Notes in Computer Science, Springer Berlin / Heidelberg, Vol. 4344, pp. 66-81, ISSN 0302-9743, DOI: 10.1007/11966104\_6 Nantes, France, September, 2006.

### ***Technical Report***

Mirandola, R., Potena, P., Scandurra, P.: "An Optimization Process for Adaptation Space Exploration of Service-oriented Applications: the Stock Trading System case study". Department of Information Technology and Mathematical Methods, Working Paper Series "Information Technology" n. 3/IT – 2011.

Mirandola, R., Potena, P., Scandurra, P., Riccobene, E.: "A framework for adapting service-oriented applications based on functional/extra-functional requirements tradeoffs: the Stock Trading System case study". Department of Information Technology and Mathematical Methods, Working Paper Series "Information Technology" n. 2/IT – 2011.