## **Curriculum Vitae of ANDREA STERBINI**

ANDREA STERBINI is assistant professor at the Computer Science Dept. of the Sapienza University of Rome since 1999, where he teaches and has taught the courses of Computer Architectures, Digital Design, Programming, and Laboratory of Robotics. From 2003 to 2013 he has been on-line tutor for the NETTUNO network university consortium. Now he is teacher and online tutor for the UNITELMA on-line university. His main research interests are in Bayesian modeling of peer-assessment, e-learning, collaborative and wiki systems, open-source software, constraint programming, algorithms and evolutionary robotics. He has been a core member of the TWiki open-source wiki project. Andrea has been workpackage leader in the EU project QUIS "QUality, Interoperability and Standards in e-learning" (e-learning Project 2004 – 3538/001-1). Andrea has also been involved in the EU project UnderstandIT (Leonardo project 2010-1-NO1-LEO05-01839) as the developer and manager of the Community of Practice site for the project (workpackage 6).

## **Other work experience**

Andrea has many years of experience as a freelance programmer in many projects and languages:

- Irrigation planning (in Java/Drools/Optaplanner)
- Text analysis and classification (in Python)
- Digital Signature application (in C++ and Java)
- Smartcard libraries (in C++ and Java)
- Database user interface (in Smalltalk)
- Desktop Publishing converter (in Prolog)

## **Refereed Papers in International Conferences and Journals**

M. De Marsico, F. Sciarrone, A. Sterbini, M. Temperini (2017). **Supporting Mediated Peer-Evaluation to Grade Answers to Open-Ended Questions.** Apr 2017 · Eurasia Journal of Mathematics, Science and Technology Education.

*M. De Marsico, A. Sterbini, M. Temperini (2016).* **Modeling peer assessment as a personalized predictor of teacher's grades: The case of OpenAnswer.** DOI: 10.1109/ITHET.2016.776074 Conference: 2016 15th International Conference on Information Technology Based Higher Education and Training (ITHET).

*S. De Cristofano, M. De Marsico, A. Sterbini, M. Temperini (2016).* **Improved computation of individual ZPD in a distance learning system.** DOI: 10.1109/ITHET.2016.7760750 Conference: 2016 15th International Conference on Information Technology Based Higher Education and Training (ITHET)

M. De Marsico, A. Sterbini, M. Temperini (2016). An analysis of factors affecting automatic assessment based on teacher-mediated peer evaluation: The case of OpenAnswer. pp.49-61. In CSEDU 2016 - Proceedings of the 8th International Conference on Computer Supported Education - ISBN:9789897581793, 97... vol. 2

M. De Marsico, F. Sciarrone, A. Sterbini, M. Temperini (2015). **Grading Open-Ended Questions in an Educational Setting, via Non-exclusive Peer Evaluation.** DOI: 10.1007/978-981-287-868-7\_44 In book: *State-of-the-Art and Future Directions of Smart Learning*. Proc. 2nd Int. Conf. on Smart Learning Environments, Workshop SPEL, Sept. 23-25, 2015, Sinaia, Romania, Publisher: Springer, Editors: Yanyan Li, Maiga Chang, Milos Kravcik, Elvira Popescu, Ronghuai Huang, Kinshuk, Nian-Shing Chen, pp.355-366

*M. De Marsico, A. Sterbini, M. Temperini (2015).* **Towards a quantitative evaluation of the relationship between the domain knowledge and the ability to assess peer work**. DOI:10.1109/ITHET.2015.7218036. pp.1-6. In 2015 International Conference on Information Technology Based Higher Education and Training, ITHET 2015 - ISBN:9781479917563

M. De Marsico; C. Limongelli; F. Sciarrone; A. Sterbini; M. Temperini (2014). **Social Network Analysis and Evaluation of Communities of Practice of Teachers: a Case Study**. DOI:10.1007/978-3-319-13296-9\_1. pp.3-12. In New Horizons in Web Based Learning - ISBN:978-331913295-2 vol. 8699

M. De Marsico, A. Sterbini, M. Temperini (2014) **Adding time and propedeuticity dependencies to the OpenAnswer Bayesian model of peer-assessment.** Proceedings ITHET 2014 York, England,

M. De Marsico, A. Sterbini, M. Temperini (2014) **Experimental Evaluation of Open Answer, a Bayesian Framework Modeling Peer Assessment.** Proceedings of IEEE 14th International Conference on Advanced Learning Technologies (ICALT) IEEE Computer Society 324 326 7- 10 July 2014 Athens, Greece,

M. De Marsico, A. Sterbini, M. Temperini (2014) **Assessing Group Composition in e-learning According to Vygotskij's Zone of Proximal Development.** Proceedings of 8th International Conference on Universal Access in Human-Computer Interaction, UAHCI 2014 - Held as Part of 16th International Conference on Human-Computer Interaction, HCI International 2014 Springer 277 288 8514 June 2014 Heraclio, Crete, Greece,

M. De Marsico, A. Sterbini, M. Temperini. (2014) **How the Granularity of Evaluation Affects Reliability of Peer-Assessment Modelization in the OpenAnswer System.** Foundations of Augmented Cognition. Advancing Human Performance and Decision-Making through Adaptive Systems Springer 212 223 8534 June 2014 Heraclion, Crete, Greece,

M. De Marsico, C. Limongelli, F. Sciarrone, A. Sterbini, M. Temperini (2014) **UnderstandIT: A Community of Practice of Teachers for VET Education.** Proceedings of 10-th International Conference on Web Information Systems and Technologies -WEBIST 2014 SciTePress 338 345 3-5 April 2014 Barcelona, Spain,

A. STERBINI, M. TEMPERINI (2013). **SocialX: An Improved Reputation Based Support to Social Collaborative Learning through Exercise Sharing and Project Teamwork.** In: J. Wang. Information Systems and Modern Society: Social Change and Global Development. IGI Global, 66-85,

M. De Marsico, A. Sterbini, M. Temperini (2013) **A Framework to Support Social-Collaborative Personalized e-Learning .** Human-Computer Interaction, Part II, HCII 2013 -New York ; Moscow ; London ; Dordrecht ; New York, NY ; Boston : Kluwer Springer Academic/Plenum Publishers : Plenum Press -New York, NY:Plenum Press 351 360 8005 Luglio 2013 Las Vegas,

A. Sterbini, M. Temperini (2013) **OpenAnswer, a framework to support teacher's management of open answers through peer assessment.** 2013 Frontiers in Education Conference Proceedings IEEE 2013 Piscataway, NJ 08855-1331 USA 164 170 23-26 October 2013 Oklahoma City, Oklahoma, US,

Andrea Sterbini, Marco Temperini (2013) **Peer-assessment and grading of open answers in a web-based e-learning setting.** 12th International Conference on Information Technology Based Higher Education and Training Institute of Electrical & amp; Electronics Engineers (IEEE) Inc. 2013 Piscataway, NJ 08854. 10-12 October 2013 Antalya, TURKEY,

Andrea Sterbini, Marco Temperini (2013) **Analysis of open answers via mediated peerassessment.** Proceedings of 6th International Workshop on Social and Personal Computing for Web-Supported Learning Communities (SPeL 2013), in connection with 17th International Conference on System Theory, Control and Computing (ICSTCC 2013). 11-13 October 2013 Sinaia, Romania,

Maria De Marsico, Andrea Sterbini, Marco Temperini (2013). A strategy to join adaptive and reputation-based social-collaborative e-learning, through the Zone of Proximal Development INTERNATIONAL JOURNAL OF DISTANCE EDUCATION TECHNOLOGIES (ISSN:1539-3100), 12-31, 11/3;

STERBINI A., TEMPERINI M. (2012) **Correcting open-answer questionnaires through a Bayesian-network model of peer-based assessment**. Proc. ITHET 2012, IEEE, 345 E 47TH ST, NEW YORK, NY 10017 USA Istanbul, Turkey.

STERBINI A., TEMPERINI M. (2012) **Dealing with Open-Answer Questions in a Peer-Assessment Environment**. Proc. Advances in Web-Based Learning - ICWL 2012, 1-4 Sept. 2012, Sinaia, Romania.

STERBINI A., TEMPERINI M. (2012) **Supporting Assessment of Open Answers in a Didactic Setting**. 2012 IEEE International Conference on Advanced Learning Technologies (ICALT 2012) - workshop DULP&SPeL @ ICALT 2012 -- Exploring the Future of Technology Enhanced Learning.

DE MARSICO M., STERBINI A., TEMPERINI M. (2011) **The Zone of Proximal Development between Adaptive Learning and Reputation-based Group Activities**.. In Proceedings of 2011 International Workshop on Distance Education Technologies (DET 2011) in conjunction with the 17th International Conference on Distributed Multimedia Systems (DMS). Florence, Italy August 18 to 20, 2011 18-20 Agosto 2011 Firenze,

CONTI A., STERBINI A., TEMPERINI M. (2011) **IBS: Intrusion Block System: a general security module for elearning systems**. Digital Information and Communication Technology and Its Applications - International Conference, DICTAP 2011 Springer Berlin Heidelberg 167 June 21-23, 2011 Dijon, France,

DE MARSICO M., STERBINI A., TEMPERINI M. (2011) **The Definition of a Tunneling Strategy between Adaptive Learning and Reputation-based Group Activities**. Proceedings of 11th IEEE International Conference on Advanced Learning Technologies - ICALT 2011 IEEE Computer Society 498 500 6-8 Luglio 2011 Athens, Georgia, USA,

GRANDE A., STERBINI A., TEMPERINI M. (2011) **Multi-Rep: an e-learning reputation** system

**aggregating information from heterogeneous sources**. WSKS 2011, 20-23 Sept. 2011 Mykonos, Greece, (WSKS 2011).

STERBINI A., TEMPERINI M (2011). **SOCIALX: reputation based support to social collaborative learning through exercise sharing and project teamwork**. INTERNATIONAL JOURNAL OF INFORMATION SYSTEMS AND SOCIAL CHANGE, ISSN: 1941-868X, doi: 10.4018/ijissc

DE MARSICO M, STERBINI A., TEMPERINI M (2010). **Tunnelling Model between Adaptive e-Learning and Reputation-based Social Activities**. In: 3rd International Workshop on Social and Personal Computing for Web-Supported Learning Communities (SPeL 2010). Bilbao, Spain, 30 August - 3 September 2010

STERBINI A., TEMPERINI M (2010). **Selection and Sequencing Constraints for Personalized Courses**. In: Frontiers in Education 2010 (FIE 2010). Arlington, Virginia, US, October 27–30, 2010

BRAGA G, STERBINI A., TEMPERINI M (2010). **A Threats Blocking Plug-in for Open Source Learning Management Systems**. In: SPRINGER CCIS 73 - 1st International Conference on REFORMING EDUCATION: Learning Technologies, Quality of Education, Educational Systems, Evaluation, Pedagogies (TECH-EDUCATION 2010). Athen, Greece, 18-21 may 2010, BERLIN / HEIDELBERG: Springer, vol. 73, p. 551-557

STERBINI A., TEMPERINI M (2010). **Social Exchange and Collaboration in a Reputation-Based Educational System**. In: 9th International Conference on Information Technology Based Higher Education and Training (ITHET 2010). Cappadocia, Turkey, 29th April - 1st May 2010

TEMPERINI M, STERBINI A. (2009). **Collaborative projects and self evaluation within a social reputation-based exercise-sharing system**. SPeL 2009. Milano, Italy. 2009. SAINT 2009 International Workshop on Social and Personal Computing for Web-Supported Learning Communities (SPeL 2009).

LONGO P, STERBINI A., TEMPERINI M (2009). **TSW: a web-based automatic correction system for C programming exercises**. In: Visioning and Engineering the Knowledge Society. A Web Science Perspective Second World Summit on the Knowledge Society, (WSKS 2009). Crete (Greece), 16-18 sep 2009, BERLIN / HEIDELBERG: Springer, vol. 5736/2009, p. 13-21, ISBN/ISSN: 978-3-642-04753-4, doi: 10.1007/978-3-642-04754-1\_2

MORLINO G, STERBINI A, NOLFI S. **Development of Abstract Categories in Embodied Agents**. 10<sup>th</sup> European Conf. On Artificial Life. Budapest, Hungary, 13-16 Sep. 2009.

STERBINI A, TEMPERINI M. (2009) **Adaptive Construction and Delivery of Web-Based Learning Paths**. San Antonio, TX, USA. October 18-21 2009. Frontiers in Education 2009 (FIE 2009).

TEMPERINI M, STERBINI A. (2008). Learning from peers: motivating students through reputation systems. SPeL 2008. Turku, Finland. 28 July 2008. SAINT 2008 International Workshop on Social and Personal Computing for Web-Supported Learning Communities (SPeL 2008).

FERNANDEZ G, STERBINI A., TEMPERINI M. (2007). **ON THE SPECIFICATION OF LEARNING OBJECTIVES FOR COURSE CONFIGURATION**. IASTED International Conference on Web Based Education (WBE 2007). Chamonix - Francia. 14-16/3/2007.

FERNANDEZ G, STERBINI A., TEMPERINI M. (2007). **Learning Objects: a Metadata Approach**. In: Eurocon 2007. Eurocon 2007. Varsavia. 9-12 Sep 2007.

KOLAS L, STAUPE A, STERBINI A., TEMPERINI M. (2007). The QUIS Requirement

**Specification of a Next Generation E-Learning System**. In: E-Learning 2007. IADIS International Conference E-Learning 2007. Lisbona, Portogallo. 6-9/7/2007.

STERBINI A., BAGNOLI F. (2007). **Detachable Learning Environments for T-learning**. IASTED International Conference on Web Based Education (WBE 2007). Chamonix - Francia. 14-16/3/2007.

STERBINI A., TEMPERINI M. (2007). Good students help each other: improving knowledge sharing through reputation systems. ITHET 2007. Kumamoto, Japan. 10-13/7/2007.

BAGNOLI F., JIPSEN P., STERBINI A. (2006). **Tiddlywiki in Science education**. Conf. on I. T. Based Higher Education and Training (ITHET 2006). Jul 2006. Sydney.

FERNANDEZ G., STERBINI A., TEMPERINI M. (2005). **Component-Based Automated E-Learning**. International Conference on Web-Based Education (WBE 2005). Grindelwald, Switzerland.

LIMONGELLI C., STERBINI A., TEMPERINI M. (2005). Automated course configuration based on automated planning: framework and first experiments. International Conference 'Methods and Technologies for Learning' (ICMTL 2005). Palermo, Italy.

BAGNOLI F., STERBINI A., TEMPERINI M. (2004). Course Configuration With Examples And Tests. EISTA '04. 2004. Orlando, USA.

FRANCO BAGNOLI, FABIO FRANCI, FRANCESCO MUGELLI, STERBINI A. (2004). **WebTeach in practice: the entrance test to the Engineering faculty in Florence**. IASTED International Conference on Web-based Education (WBE 2004). Innsbruck, Austria.

STERBINI A., TEMPERINI M. (2004). **Course configuration via logic and graphic tools**. IASTED International Conference on Web-based Education (WBE 2004). Innsbruck, Austria.

STERBINI A., TEMPERINI M. (2004). Automatic Correction of C Programming Exercises Through Unit-Testing and Aspect-Programming. EISTA '04. 2004. Orlando, USA.

BAGNOLI F., FRANCI F., STERBINI A. (2003). **E-learning with WebTeach - a prototype system for exam delivery and on-line teaching**. EISTA 03.

STERBINI A., TEMPERINI M. (2003). **A logical framework for course configuration in elearning**. ITHET - 4th Int. Conf. on I. T. Based Higher Education and Training. Marrakech, Marocco.

STERBINI A., TEMPERINI M. (2003). **Design and implementation of a logical framework for course configuration in e-learning**. IASTED Int. Conf. on Computers and Adv. Tech. in Education (CATE 2003). Rhodos, Greece.

BAGNOLI F., FRANCI F., STERBINI A. (2002). **WebTeach: an integrated web-based Cooperative Environment for Distance Teaching**. Software Engineering and Knowledge Engineering 2002. Ischia, Italy.

BAGNOLI F., FRANCI F., STERBINI A. (2002). **WEBTEACH: WEB TOOLS FOR TEACHERS AND STUDENTS**. Frontiers in Education 2002. Boston, MA, USA. STERBINI A. (2002). **Automatic Correction of Complex Technical Exercises**. Frontiers In Education 2002. Boston, MA, USA.

ROGORA E., STERBINI A. (2001). **Multiple Choice Quiz in a Web Assisted Teaching Environment**. Didamatica 2001. Bari, Italy.

STERBINI A., BAGNOLI F. (2001). **WebTeach: a Cooperative Web Environment for Teaching Science and Technology**. ATCM 2001. Melbourne, VIC, Australia.

STERBINI A., DI IANNI M., SORRENTINO R. (2000). **Constraint tree drawing for antenna layout**. Computer Graphics and Imaging 2000, IASTED 2000.

PELED U., PETRESCHI R., STERBINI A. (1999). (n,e)-graphs with maximum sum of squares of degrees. JOURNAL OF GRAPH THEORY. vol. 31 (4), pp. 283-295 ISSN: 0364-9024.

STERBINI A., RASCHLE T. (1998). **An O(n3) Time Algorithm for Recognizing Threshold Dimension 2 Graphs**. INFORMATION PROCESSING LETTERS. vol. 67 (5), pp. 255-259 ISSN: 0020-0190.

CALAMONERI T., STERBINI A. (1997). **3D Straight-line Grid Drawing of 4-colourable Graphs.** INFORMATION PROCESSING LETTERS. vol. 63 (2), pp. 97-102 ISSN: 0020-0190.

DE AGOSTINO S., PETRESCHI R., STERBINI A. (1997). **An O(n^3) Recognition Algorithm for Bithreshold Graphs**. ALGORITHMICA. vol. 17 (4), pp. 416-425 ISSN: 0178-4617.

CALAMONERI T., STERBINI A. (1997). **Drawing 2-, 3- and 4-colourable Graphs in O(n^2) Volume. Graph Drawing '96**. Lecture Notes in Computer Science 1190.

PETRESCHI R., STERBINI A. (1996). **Threshold Graphs and Synchronization Protocols**. Combinatorics and Computer Science. (pp. 378-395). Lecture Notes in Computer Science 1120.

CLAUSEN J., STERBINI A., TRAFF J. L. (1996). **An Easily Computable Lower Bound for the Graph Partitioning Problem**. Technical Report 96/18. DIKU, Dept. of Computer Science University of Copenhagen.

PETRESCHI R., STERBINI A. (1995). **Recognizing Strict 2-Threshold Graphs in O(m) Time**. INFORMATION PROCESSING LETTERS. vol. 54 (4), pp. 193-198 ISSN: 0020-0190.

DE AGOSTINO S., PETRESCHI R., STERBINI A. (1995). **Parallel Maximum Matching and Threshold Graphs**. Fifth Italian Conference on Theoretical Computer Science. (pp. 94-101).

DE AGOSTINO S., PETRESCHI R., STERBINI A. (1992). **Strict 2-threshold exclusion graphs**. Fourth Italian Conference on Theoretical Computer Science. (pp. 294-304).

Rome 30/1/2017 Signed

Onder Steeling