



ABCDE



Scientific Report

First name / Family name

Michail N. Giannakos

Nationality

Greek

Name of the *Host Organisation*

NTNU

First Name / family name
of the *Scientific Coordinator*

Letizia Jaccheri

Period of the fellowship

06/09/2012 to 05/09/2013



I – SCIENTIFIC ACTIVITY DURING YOUR FELLOWSHIP

The research conducted during the fellowship period can be summarized in three broad categories: (I) Creativity Enhanced Learning, (II) Computer Science Education and (III) User Experience and Behaviour.

The research conducted focuses on the design and study of emerging technologies and pedagogies in online and hybrid education settings, and their relationship to student and instructor experiences and practices. During the fellowship the researcher focused on making sense of users experiences and practices in order to redesign and optimize the education settings and systems. The goal of the researcher is to extend the understanding of why and how learners and scholars use technologies in the ways that they do and how the current technologies and practices can be improved.

On each of the aforementioned categories the following papers were produced:

Creativity Enhanced Learning: J1, J5, J6, J9, C1, C2, C3, C4-8, C10-11, C14, W1-4, E1, E3

Computer Science Education: J3, C9, C15, E2

User Experience and Behaviour: J2, J4, J7, J8, C12, C13

II – PUBLICATION(S) DURING YOUR FELLOWSHIP

International Journals

- J1. Giannakos, M.N. (Forthcoming). Exploring the video-based learning research: A review of the literature. *British Journal of Educational Technology*, Wiley.
- J2. Pappas, I., Kourouthanasis, P., Giannakos, M.N., Chrissikopoulos, V. (Forthcoming). Shiny happy people buying: The role of emotions on personalized e-shopping, *Electronic Markets*, Springer.
- J3. Doukakis, S., Giannakos, M.N., Koilias, Ch., Vlamos, P. (Forthcoming). Measuring Students' Acceptance and Confidence on Algorithms and Programming: The Impact of the Engagement with CS on Secondary Education, *Informatics in Education*
- J4. Pappas, I., Pateli, A., Giannakos, M.N., Chrissikopoulos, V. (Forthcoming). Moderating Effects of Online Shopping Experience on Customer Satisfaction and Repurchase Intentions, *International Journal of Retail & Distribution Management*, Emerald.
- J5. Giannakos, M.N. (2013). Enjoy and Learn with Educational Games: Examining Factors Affecting Learning Performance. *Computers & Education*, Elsevier, 68, 429–439.
- J6. Mikalef, K., Giannakos, M.N., Chorianopoulos, K., Jaccheri L. (2013). Does informal learning benefit from interactivity? The effect of trial and error on knowledge acquisition during a museum visit. *Int. J. Mobile Learning and Organisation*, 7(2), 158-175.
- J7. Giannakos, M.N., Pateli, A., Chorianopoulos, K. (2013). Investigating Facebook's Acceptance and Satisfaction: A Study in the Greek University Community. *International Journal of Social and Humanistic Computing*, 2(1), 104-117.
- J8. Mikalef, P., Giannakos, M., & Pateli, A. (2013). Shopping and Word-of-Mouth Intentions on Social Media. *Journal of Theoretical and Applied Electronic Commerce Research*, 8 (1), 17-34.
- J9. Giannakos, M.N., Jaccheri, L., Leftheriotis, I. (2012). Learning and Creativity through Tabletops: A Learning Analytics Approach. *Bulletin of the IEEE Technical Committee on Learning Technology*, 14(4), 11-13.



International Conferences

- C1. Giannakos, M.N., Jaccheri, L., Morasca, S. 2013. An empirical examination of behavioral factors in creative development of game prototypes. In Proc. of the 12th IFIP TC13 International Conference on Entertainment Computing (ICEC 2013), LNCS, Springer.
- C2. Giannakos, M.N., Jaccheri, L. 2013. An Enriched Artifacts Activity for Supporting Creative Learning: Perspectives for Children with Impairments. In Proc. of the 12th IFIP TC13 International Conference on Entertainment Computing (ICEC 2013), LNCS, Springer.
- C3. Giannakos, M.N., Chorianopoulos, K., Ronchetti, M., Szegedi, P., and Teasley, S. 2013. Analytics on Video Based Learning. In Proc. of the ACM Conference on Learning Analytics & Knowledge, (LAK 2013), ACM Press.
- C4. Chorianopoulos, K., & Giannakos, M.N. 2013. Usability design for video lectures, In Proc. of the 11th European conference on Interactive tv and video (EuroITV'13), ACM Press.
- C5. Giannakos, M.N., Jaccheri, L. 2013. What motivates children to become creators of digital enriched artifacts? In the ACM Conference on Creativity & Cognition (C&C '13), ACM Press.
- C6. Giannakos, M.N., Jaccheri, L. 2013. Designing Creative Activities for Children: The Importance of Collaboration and the Threat of Losing Control. In Proceedings of the 12th International Conference on Interaction Design and Children (IDC '13), ACM Press.
- C7. Hoiseth, M., Giannakos, M.N., Alsos, O.A., Asheim, J., Jaccheri, L. 2013. Designing Healthcare Games and Applications for Toddlers. In Proceedings of the 12th International Conference on Interaction Design and Children (IDC '13), ACM Press.
- C8. Jaccheri, L., Giannakos, M.N., 2012. Open Source Software for Entertainment. In Proc. of the 11th International Conference on Entertainment Computing (ICEC 2012), LNCS 7522, Springer, 604-607
- C9. Giannakos, M.N., Hubwieser, P., Chrisochoides, N. 2013. How Students Estimate the Effects of ICT and Programming Courses. In Proc. of the 44th ACM technical symposium on Computer Science Education, (SIGCSE 2013), ACM Press.
- C10. Hoiseth, M., Giannakos, M.N., Jaccheri, L. 2013. Research-Derived Guidelines for Designing Toddlers' Healthcare Games. In CHI '13 Extended Abstracts on Human Factors in Computing Systems (CHI EA '13), ACM Press.
- C11. Giannakos, M.N., Chorianopoulos, K., Jaccheri, L., Chrisochoides, N. 2012. This game is girly!! Perceived enjoyment and student acceptance of edutainment. In Proc. of the 7th International Conference on E-Learning and Games, (Edutainment 2012), LNCS 7516, Springer, 89-98.
- C12. Pappas, I. Giannakos, M.N., Kourouthanassis, P., and Chrisikopoulos, V. 2013. Assessing Emotions Related to Privacy and Trust in Personalized Services. In proceedings of the 12th IFIP Conference on e-Business, e-Services, e-Society (I3E 2013), Vol. 399, Springer, 38-49.
- C13. Mikalef, P., Pateli, A. and Giannakos, M.N. 2013. Why are users of Social Media inclined to Word-of-Mouth?. In proceedings of the 12th IFIP Conference on e-Business, e-Services, e-Society (I3E 2013), Vol. 399, Springer, 112-123.
- C14. Garneli B, Giannakos MN, Chorianopoulos K and Jaccheri L. 2013. Learning by Playing and Learning by Making, In 4th International Conference on Serious Games Development and Applications (SGDA 2013) LNCS, Springer.
- C15. Giannakos, M. N., Hubwieser, P., & Ruf, A. (2012). Is Self-Efficacy in



Programming Decreasing with the Level of Programming Skills? In Proc. of the 7th Workshop in Primary and Secondary Computing Education (WiPSCE 2012). ACM, New York, NY, USA, 16-21.

International Workshops

- W1. Giannakos, M.N., Jaccheri, L., Lethariotis, I. (2013). Our Toys: Towards an Enriched Artifacts Activity for Supporting Creative Learning, In Workshop on Interactive technologies that enhance children’s creativity.
- W2. Giannakos, M.N., Chorianopoulos, K., Ronchetti, M., Szegedi, P., &Teasley, S. (2013). Expanding Horizons and Envisioning the Future of Analytics on Video-Based Learning. In Proceedings of the Workshop on Analytics on Video-based Learning, (WAVE 13) CEUR-WS, Vol. 983, 1-6.
- W3. Chorianopoulos, K., & Giannakos, M.N. (2013). Merging learner performance with browsing behavior in video lectures, In Proceedings of the Workshop on Analytics on Analytics on Video-based Learning, (WAVE 13) CEUR-WS, Vol. 983, 38-42.
- W4. Ilioudi, C., Giannakos, M.N., Chorianopoulos, K., Investigating Differences Among the Common Used Video Lecture Types In Proceedings of the Workshop on Analytics on Video-based Learning, (WAVE 13) CEUR-WS, Vol. 983, 21-26.

Editing

- E1) The proceedings of the International Workshop on Analytics on Video-based Learning (WAVE): <http://ceur-ws.org/Vol-983>
- E2) Special issue in “Computer Science Education in Schools” on The ACM Transactions on Computing Education (TOCE), Webpage dedicated to the special issue: <http://www.ddi.edu.tum.de/forschung/laufende-projekte/computer-science-education-in-schools/>
- E3) Special Issue in “Video Based Learning” on the The International Journal of Emerging Technologies in Learning, webpage dedicated to the special issue: <https://sites.google.com/a/ionio.gr/wave/ijet>

III – ATTENDED SEMINARS, WORKHOPS, CONFERENCES

International Conferences and Workshops

- The 12th ACM International Conference on Interaction Design and Children (IDC '13), 25-27 June 2013, New York, USA
- Workshop on Interactive technologies that enhance children’s creativity, 24 June 2013, New York, USA
- The 9th ACM Conference on Creativity & Cognition (C&C '13), 17-20 June, 2013, Sydney, Australia
- The 44th ACM technical symposium on Computer Science Education, (SIGCSE 2013), 6-9 March, 2013, Denver, USA
- The Computer Science Education Research Conference (CSERC 13), 4-5 April 2013, Arnhem, The Netherlands
- Workshop on Analytics on Video-based Learning, 8 April 2013, Leuven, Belgium
- The 3rd International Conference on Learning Analytics and Knowledge Pages (LAK



2013), 9-12 April 2013, Leuven, Belgium

- The 7th Workshop in Primary and Secondary Computing Education (WiPSCE 2012), November 8-9, 2012, Hamburg, Germany
- The 11th International Conference on Entertainment Computing (ICEC 2012), September 26-29, Bremen, Germany
- The 4th Workshop on Mobile Gaming, Mobile Life - Interweaving the Virtual and the Real (MOGA 12), September 26-29, Bremen, Germany
- The 7th International Conference on E-Learning and Games, (Edutainment 2012), September 18-20 2012, Darmstadt, Germany

Seminars

- The Research Council of Norway seminar on the last calls for the ICT programme of the EU 7th Framework. September 14, 2012, Trondheim, Norway
- ERCIM Seminar II, 24-25 October, 2012. Sophia Antipolis, France
- Marie Curie Information Meeting, 13 March, 2013, Trondheim, Norway
- Informasjonsmøter om FRIPRO/Information for the Norwegian Research council research programmed, 30 April, Trondheim, Norway

Organization of Workshops/Tutorials:

1. Workshop in the ACM Learning Analytics and Knowledge Conference 2013 (LAK 13): Workshop on Analytics on Video-based Learning (WAVE '13) (<https://sites.google.com/a/ionio.gr/wave/>)
2. Tutorial in ACM European conference on Interactive TV and video 2013 (EuroITV'13): Usability design for video lectures (<http://www.euro-itv.org/program/tutorials>)
3. Tutorial in the IFIP International Conference on Entertainment Computing 2012 (ICEC'12): Open Source Software for Entertainment (<http://wp.me/PXD0L-tm>)

IV – RESEARCH EXCHANGE PROGRAMME (REP)

École Polytechnique Fédérale de Lausanne (EPFL)/ PEDAGOGICAL RESEARCH AND SUPPORT CRAFT Lab, 4-12 February 2013, Lausanne, Switzerland

During my visit at CRAFT lab I gave a presentation with a title "Past, Present and the Way Ahead of the Educational Technology Research" and I had the opportunity to discuss and cooperate with many members of the lab and the Director Prof. Pierre Dillenbourg.

Katholieke Universiteit Leuven (KU Leuven)/ Centre for User Experience Research (CUO), 19/24 May, 2012 2013, Leuven, Belgium

During my visit at CUO I gave a presentation with a title " User Experience Research for Learning Applications" and I participated in several activities (e.g., demonstrations) and discussions organized by the Research Director of the centre Dr. David Geerts.