



ABCDE



Scientific Report

First name / Family name

Ines Di Loreto

Nationality

Italian

Name of the *Host Organisation*

NTNU-Trondheim, Norway

First Name / family name
of the *Scientific Coordinator*

Monica Divitini

Period of the fellowship

01/02/12 – 31/01/13



I – SCIENTIFIC ACTIVITY DURING YOUR FELLOWSHIP

Part of my work during this one year fellowship was related to the European project Mirror (<http://www.mirror-project.eu/>). The focus of Mirror is the creation of an easily used set of applications that enable employees to learn lessons from their own and others experiences to perform better in the future. The project facilitates learning 'on the job', at the workplace, through collaboration and reflection technologies. While there are different bedtests in the project I'm focusing in particular on emergency workers.

The other project I have worked on is Fabula (<http://fabula.idi.ntnu.no/>), a project about the creation of seamless networks for transforming the city into an arena for learning. In this case the project is more oriented towards the investigation of how collaborative learning takes place in a city with the support of mobile and wireless technology.

Due to the freedom linked to the ERCIM fellowship I was able to address the problems linked to the projects at different levels:

- 1) As my main research interest focus on the use of different kind of **Serious Games** to foster different types of skills I was able to work on different games to foster reflection (as you can see from the published papers).
- 2) Secondly, I'm interested in the use of different **interaction modalities** (for example tangible interfaces) to let the users focus on the task and not on the tool, following the researches that I started during my previous post-doc. During this year I was able to collaborate with Monica Divitini's Group also on this aspect as her group has competences also on this topic.
- 3) Finally I had the possibility to continue the work on **social interaction**. Actually social interaction is able to enhance motivation and prolong engagement with the task. In particular it helps in bring forth more information and ideas that could be shared and perhaps result in deeper thinking about the subject. This interaction might take place during the learning activity or it may occur later in formal or informal group discussions.

More specifically, main research outcomes, among others, drawn upon the following activities:

- The design of a set of games for teaching different skills
- A study around which kind of device helps in fostering which kind of skill
- A study around which gamification approach can support collaborative reflective learning.

II – PUBLICATION(S) DURING YOUR FELLOWSHIP

[1] Di Loreto I., Divitini M., Mora S. Don't Panic: Enhancing Soft Skills for Civil Protection Workers .SGDA- Conference on Serious Games development and Applications, volume 7528 of Lecture Notes in Computer Science, page 1-12. Springer

[2] Di Loreto I., Divitini M., Mora S. Collaborative serious games for crisis management: an overview. WETICE 2012- IEEE International Conference on Collaboration Technologies and Infrastructures. Track on Collaborative Technology for Coordinating Crisis Management.

Submitted Papers



- [1] Di Loreto I., Lange B., Seilles A., and Andary S. Designing Health Games and Interfaces for General Public Adoption: the Example of Hammer and Planks. Submitted at the FDG-Foundation of digital games 2013 conference.
- [2] Di Loreto I., Divitini M., Mora S. Don't Panic: towards collaborative serious games for crisis management. Submitted at the International Journal of Information Systems for Crisis Response and Management (IJISCRAM).
- [3] Di Loreto I., Lange B., Seilles A., and Andary S. Designing Therapeutic Games as casual games for all. Submitted at CHI2013.
- [4] Di Loreto I., Divitini M., Mora S. Design mobile augmented games for crisis management training. Submitted at the IADIS International Conference – Mobile Learning 2013.

III – ATTENDED SEMINARS, WORKHOPS, CONFERENCES

Conferences/workshops with presentation:

- **CSCW 2012** - Conference on Computer Supported Cooperative Work. February 11-15. Bellevue -USA.
- **SGDA 2012**-International Conference on Serious Games Development and Applications . Bremen, Germany - September 26-27, 2012
- **UCD 2012**. Conference on User Centered Design. 9 -10 November 2012. London, United Kingdom
- **AMI2012**-International Joint Conference on Ambient Intelligence. Pisa, Italy - November 13-15, 2012

Followed Seminars

- ABCDE Seminar, 24-26 October 2012, Toulouse, France.
- The Research Council of Norway seminar on the last calls for the ICT programme of the EU 7th Framework. September 14, 2012

Given Seminars

- *Social and interaction aspects in serious games: The case of post-stroke rehabilitation games*. Presentation given at NTNU- Trondheim, Norway -15/03/2012
- *Design aspects in serious games for health*. Presentation given at SINTEF (<http://www.sintef.no/>) - Trondheim, Norway - 03/09/2012
- *Lesson learned from designing rehabilitation games*. Presentation given at Mobile Life Center/ Stockholm, Sweden - 05/12/2012
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IV – RESEARCH EXCHANGE PROGRAMME (REP)

REP 1: INRIA (French National Institute for Research in Computer Science and Control), November 29- December 4 2012, Paris, France

During my visit at INRIA, I had the opportunity to cooperate with Wendy Mackay who is the Director of the inSitu Lab. I had extensive discussions with her and other researchers in the



unit with regards Human Computer Interaction and I had the possibility to understand better the work done in her lab.

REP 2: Swedish Institute of Computer Science (SICS), December 3–10, 2012, Stockholm, Sweden

During my visit in Mobile Life Centre, SICS, I had the opportunity to cooperate with Prof. Annika Waern. As a part of Mobile Life Centre has a particular focus on Mobile Games I had the opportunity to exchange in particular on this topic. Also, I gave a presentation on my post-doctoral research and exchanged ideas with other research scientists in the lab, as well as analysed scientific issues concerning Serious Game design.