



ERCIM "ALAIN BENSOUSSAN"
FELLOWSHIP PROGRAMME



Scientific Report

First name / Family name

Emil Robert Kaburuan

Nationality

INDONESIA

Name of the *Host Organisation*

SICS Swedish ICT

First Name / family name
of the *Scientific Coordinator*

Jarmo Laaksolahti

Period of the fellowship

01/10/2014 to 30/09/2015

I – SCIENTIFIC ACTIVITY DURING YOUR FELLOWSHIP

During my fellowship I joined the People Technology (PPL) Group at SICS Swedish ICT and Mobile Life Centre. I work on the project Enjoyment @ Work with ABB. The project builds on previous work together with ABB on creating enjoyable and engaging control room environments, together with insights from a workshop including representatives from Swedish automation industry. What we propose here takes that exploration and collaboration to the next level. The idea is to design technology that allows operators to instrument their working environment through IoT technology in a way that lets their physical activities become visible, playful, and engaging contributions to an ongoing exchange about the workplace and the people that inhabit it. We focus on two aspects. Firstly, on exploring richer embodied interactions in control rooms by designing for operators' use of gestures, measuring bio data, sensing activity and so forth to express themselves in social situations. Secondly, on richer embodied representations of such interactions that resists reducing social interaction to 'Like' counts a la Facebook.

Together this allows for playful and meaningful embodied interactions with a tight coupling to what happens in the control room. The work will be conducted as a series of "technical probes", where we design and develop pieces of technology that are injected into real control room environments and used by operators. Each probe will be investigating a different idea in the problem/design space, an approach that has previously proven to be successful in control room environments.

I also involve in developing the CHI community in Indonesia through the Indonesia ACM SIGCHI Chapter (CHI UX Indonesia). We organized the first CHIuXiD

International HCI and UX Conference in Bandung, Indonesia. There were 120 participants from Indonesia, Australia, Malaysia, and Japan attended the conference.

II – PUBLICATION(S) DURING YOUR FELLOWSHIP

I haven't published anything during my fellowship. I have explored lots of ideas and possibilities for the project. I also conducted several workshops for generating the ideas. As of now I just finished with the conceptual idea and paper prototype. It takes time to continue to build and test the prototype. I will pass the work and continue to support from distance after finishing my fellowship. We agree to continue the work and have some publication later on.

III – ATTENDED SEMINARS, WORKHOPS, CONFERENCES

- People Technology Lab Getaway Workshop (Uppsala, SWEDEN), Nov. 2-4, 2014.
- Usability Day 2014 (Stockholm, SWEDEN), Nov. 13, 2014.
- Future Control Room Workshop (Borås, SWEDEN), Dec. 3, 2014.
- Mobile Life Open House 2015 (Stockholm, SWEDEN), Jan. 21, 2015.
- Mobile Life Funding Proposal Workshop (Lisbon, PORTUGAL), Mar. 9-11, 2015.
- SICS Swedish ICT Open House Exhibition (Stockholm, SWEDEN), March 19, 2015.
- CHIuXiD International Conference (Bandung, INDONESIA), April 8-10, 2015.
- Design Interaction Showcase (Trondheim, NORWAY), May 7, 2015.
- Sharing Economy and the Future of Money workshop (Stockholm, SWEDEN), June 1, 2015.
- Mobile Life Writing Workshop (Stockholm, SWEDEN), Jun. 15, 2015.
- Control Room Idea Generation Workshop (Stockholm, SWEDEN), June 17, 2015.
- Design Fiction Workshop (Stockholm, SWEDEN), Aug. 31, 2015.
- SICS Swedish ICT Kick Off (Stockholm, SWEDEN), Sept. 9, 2015.

IV – RESEARCH EXCHANGE PROGRAMME (REP)

Norwegian University of Science and Technology (NTNU), Department of Computer and Information Science
Prof. Dag Svanæs, Ph.D.
May 6 – 13, 2015

During my visit I met six professors for in-depth interview and took part in the teaching and research activities. I found that my research interest has a close match with the research at the department, which led to a number of interesting potentials for future collaboration.