

Postdoc Position at LIRIS, University of Lyon – France

Title: Trace-based histories for navigating in image databases

Keywords: Reflexive UIs, interaction with histories, trace-based systems, activity modelling, image database navigation, multimodal and gesture-based HCI

Environment: LIRIS UMR 5205 CNRS - <http://liris.cnrs.fr>, SILEX Team - <http://liris.cnrs.fr/silex> situated in Lyon, France

Duration: 21 months, beginning in sept 2012

Salary: > 2200 € net

Context: The Egonomy project aims at building an intuitive engine based on comportemental analysis for exploring large image databases. Two prototypes will be developed: a public website and a museographic installation. The partners of the project are Moben fact and Art&fact, Réunion des Musées Nationaux Grand Palais, Pertimm, CEA List, LIRIS, IRI-Centre Pompidou and Lutin Userlab.

The SILEX team has defined a modelled-based approach for collecting, managing and using traces within Trace-based Systems (TBS). Modelled traces are transformed and queried to be used in various applications that support interaction analysis or reflexive activities. In that latter case, users use the trace as a history of their own activity. The use of traces for a reflexive activity poses several questions related to visualization (understanding one's own activity from its representation) and interaction (acting on one's activity representation so as to appropriate it).

Objectives: In the context of the egonomy project, the candidate will contribute to implement a trace-based system approach, mostly by designing and validating UIs for navigating in an image database history. More precisely, the different tasks will consist in:

- Analysis and modeling of image database navigation activity, primary trace gathering (implementation of collectors into the prototypes developed by the project partners)
- Specification of the transformations required to get higher level traces in order to allow reflexivity
- Design of UIs for the visualization and navigation in histories and traces (interactions and presentation)
- Implementation (prototyping) and evaluation of UIs
- Publication

Application

Candidates should have a PhD in Human-Computer Interaction, good programming and experimental skills, and be fluent in English (written and spoken).

Send vitae + motivation + recommendation(s) + references to Yannick Prié (yannick.prie@liris.cnrs.fr) and Audrey Serna (audrey.serna@liris.cnrs.fr)