We are looking for a **post-doctoral fellow** interested in working in the LiveMemories project (<u>http://livememories.fbk.eu/</u>). (A position for a top **student** interested in pursuing a **PhD** as part of the same project is also available.)

The research will be conducted under the direct supervision of Fausto Giunchiglia (<u>http://www.disi.unitn.it/~fausto/</u>) in the Knowdive Group (<u>http://dit.unitn.it/~knowdive/</u>), a large, multicultural and multidisciplinary group which is part of the Department of Computer Science and Information Engineering ( <u>http://disi.unitn.it/welcome</u>), University of Trento ( <u>http://portale.unitn.it/ateneo/</u>).

**Key words** describing the research area of interest are: metadata management and visualization; human-computer interaction; mash-ups; social networks; geographical, spatial, and temporal data.

## Essential skills and knowledge relevant to the project are:

- knowledge and experience concerning user interface design and evaluation, along with a general knowledge of human-computer interaction;
- knowledge of languages and methodologies used for the development of rich dynamic web applications (e.g., HTML, JavaScript, XML, CSS, AJAX, mash-ups).

## Desirable skills and knowledge relevant to the project are:

- understanding of the modeling primitives of the most popular social networks (e.g., Facebook, Myspace, Flickr) – particularly, knowledge of the open protocols of these networks as well as of related standardization initiatives (e.g., OpenSocial, LinkedData);
- knowledge of the typical architectures of web-based applications and related methods and technologies (e.g., cookies, authorized access to web contents, dynamic generation of web contents);
- knowledge of the principles of database design and of relevant languages and methodologies, such as ER diagram modeling, normal forms, SQL, and query optimization;
- experience in developing applications under and/or administering at least one of the more popular DBMSs (e.g., Oracle, DB2, MySQL, PostgreSQL);
- experience in working with geo-spatial databases (e.g, PostGIS);
- experience with project management.

## Knowledge of Italian is not required.

The ideal candidate holds a PhD with top performance in a field related to the areas mentioned above. (S)he should have a proven track record of system design and development as well as of conducting original research and publishing results in good conferences and journals. (S)he should be proactive, self-motivated, able to work independently and in a team, and capable of running projects and leading a small group of programmers and PhD students.

The **main activities and project responsibilities** of the successful candidate and the persons they supervise will concern the design, implementation, and evaluation of user interfaces and associated functionality for:

- accessing, managing, and sharing data, metadata, and ontologies in a multimedia environment;
- accessing, managing, and sharing geographical, spatial, and temporal data;
- enabling the use of social intelligence, including visualization, access, and management of communities;
- organizational intelligence.

The candidate and the supervisees will also design and implement an API and a mash-up language for metadata, data, and community integration, including temporal and spatial data. They will also supervise and manage the use in real world conditions of the systems that they develop.

The successful candidate will be expected to create a small but strong group of programmers and PhD students that will produce top-level research and publish it in the major relevant venues.

The successful candidate will support the project coordinator in the overall project management activities. These activities will include, among other things: managing their work and that of the collaborators; continuous monitoring and checking of the project results; producing project deliverables; and managing contacts and collaborations with the project partners.

**Salary:** According to experience, but expected to fall in the range 24KEuro – 36KEuro/ year \*\*NET\*\*, including coverage of basic health insurance.

**Duration:** 3 years plus possibly a few extra months, starting as soon as possible and ending with the end of the project.

**How to apply:** Send your CV, a letter explaining your interest in the position, and the names of three referees by December 15th to: <u>fausto@disi.unitn.it</u>.

**About us:** The Department of Information Engineering and Computer Science of the University of Trento is a leading and fast-growing research institution, characterized by a young and international faculty and a large, international student population.

**About Trento:** Trento (<u>http://www.apt.trento.it/</u>) is a small vibrant city (around 100K people) with a beautifully preserved historic center, situated in the middle of the Dolomites. It is consistently ranked at the top in Italy for quality of life. Thanks to its fortunate location, Trento offers a wide variety of cultural and sports opportunities all year around, as well as excellent food and wine.

Further information: Fausto Giunchiglia, fausto@disi.unitn.it