

## Research Project

### City-Stories: spatio-temporal search over crowdsourced content

#### Third-party funded project

**Project title** City-Stories: spatio-temporal search over crowdsourced content

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**Status** Completed

A driving force behind the development of novel services tailored to the needs of citizens is the increasing flexibility of social time. Even though city residents may possess valuable information for other citizens visiting their home area, it is hardly usable with today's information systems because of the inevitably scattered information resources. Considering the explosive growth of information, knowledge sharing can ensure valuable interdisciplinary applications and services development. While many organizations propose relevant data sets, they are hardly accessed, analyzed and reused in an integrated way—despite of the enormous added value such integration would have—because of the heterogeneity of formats, the lack of interoperability, and the inappropriate support for information browsing and visualization.

The City-Stories platform for data crowdsourcing and spatio-temporal knowledge visualization will overcome these limitations by jointly addressing three tightly coupled challenges. First, *data integration* responsible for locating, extracting, and syntactically aligning heterogeneous data. Second, novel approaches to *spatio-temporal multimedia search and browsing* on top of the integrated data, providing users new perspectives and query types to explore these data. Third, the *knowledge crowdsourcing and visualization* responsible for gathering users' content and enrich this content with linked data services, in order to offer a novel way of knowledge visualization. From a high-level perspective, City-Stories platform is composed of three main modules:

1. Data integrator module responsible of gathering distributed and heterogeneous data and offering data alignment, mapping and cleaning
2. Retrieval engine that stores combined and semantically enriched data and metadata in order to serve as basis for advanced spatio-temporal and personalized queries
3. Knowledge crowdsourcing and visualization module that offers an adaptive and profile aware crowdsourcing and knowledge visualization and navigation interface

**Financed by**

Foundations and Associations

**Add publication****Published results**

3695616, Beck, Lukas; Schuldt, Heiko, City-Stories: A Spatio-Temporal Mobile Multimedia Search System, Publication: ConferencePaper (Artikel, die in Tagungsbänden erschienen sind)

**Add documents****Specify cooperation partners**

ID	Kreditinhaber	Kooperationspartner	Institution	Laufzeit - von	Laufzeit - bis
3373637	Schuldt, Heiko	Cudré-Mauroux, Philippe	Université de Fribourg	01.01.2016	31.12.2021
3373734	Schuldt, Heiko	Sokhn, Maria	HES-SO Valais	01.01.2016	31.12.2021