Ontology Summit 2014 Big Data and Semantic Web Meet Applied Ontology

Track E: Hackathon

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Mission

The mission of the Hackathon (

http://ontolog.cim3.net/cgi-bin/wiki.pl?OntologySummit2014_Hackathon) is to have fun during a 1-day long international hacking event exploring hacking solutions that span both paradigm and technology gaps between the Big Data, Semantic Web, Application Ontology domains.

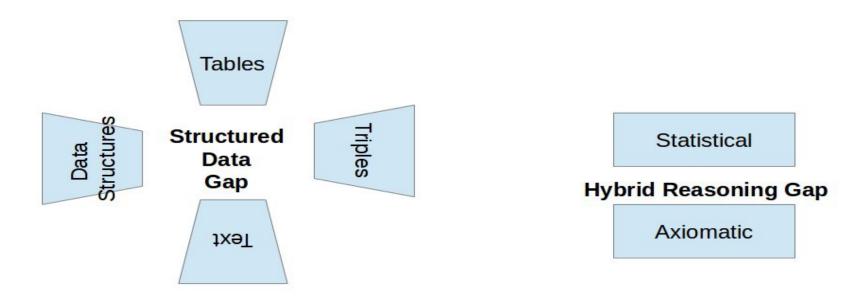
In particular, the structured data gap (tables vs triples vs exotic specialized data structures vs text), schema reusability gap (ad hoc schemas vs ontology), and the hybrid reasoning gap ("statistical reasoning" vs "axiomatic reasoning"). We particularly encourage projects that cross a minimum of two (ideally three) of these themes, but hackathon teams from all areas of applied or theoretical ontologies are welcomed!

The goal of this year's hackathon is to build upon the success of last year's collaboration (

http://ontolog.cim3.net/cgi-bin/wiki.pl?OntologySummit2013_Hackathon_Cli nics

), stimulating live communication and collaboration across data, semantic and ontology communities. In particular we hope that practical hackathon projects can bring together theoretical and applied perspectives.

The Gaps



Ad Hoc Schema

Schema Reusability Gap

Ontology

Call for projects

The Hackathon includes both software coding and data preparation that provide example of cross-domain experience for hackathon teams members. Hackathons are best suited to short projects dealing with tools (data modelers, reasoners, ontology editors, etc.), datasets (data models, vocabularies, ontologies, etc.) and approaches for:

- identifying candidate tools/techniques for scaling up ontological approaches (e.g. sparse matrix representations for speed up),
- using standards for data conversion (e.g. CSV to semantic),
- using ontology and/or semantic web tools in data federation (e.g. reference data libraries or vocabularies),
- providing mapping/conversion cases of data models, semantic data annotations, domain ontologies,
- applying ontology patterns for semantic annotation and data transformation and query
- converting of public interest datasets to semantic annotated data and publishing it
- provide examples of "schema-free" approach for data processing
- demonstrate statistical and logical reasoning in one task
- infrastructure providing for Ontology Summit (e.g. website, data repository)
- ... any other project that will be suggested by participants.

Projects that build upon and integrate themes from elsewhere across Ontology Summit-2014 are preferred.

Work Plan

- invite teams for participation (...in process...)
- publish suggestions that "fit to Ontology Summit agenda" (till 27 February to gather teams)
- present your team "sales pitch" at Hackathon Track E 2-hour session, 27th February 2014
- let teams be populated by new members that interested in particular projects
- have fun at 24 hour (1-day) hackathon event, 29 March 2014, Saturday. We will establish communication infrastructure for all participants.
- There will be a short Hackathon report at Session-12 (Synthesis-II
 - Technical Tracks and Hackathon)3 April 2014
- collect reports from participating teams
- provide demonstrations and synthesis of results from reports to Ontology Summit community at the 2014 Symposium

Current suggestions

Join discussion on Ontolog Summit List about possible Hackathon projects:

- Victor Agroskin: Whole data-transformation chain or a part of it (raw data - mapping - ontology-linked data
 - pattern search Linked Data web page presentation) with .15926 Editor.
- Gary Gerg-Cross, Mike Bennett: Developing/revising an Ontology Pattern as recently discussed in Track C and also Track A.
- ... suggest your own project or join to already existing team!

What next

- If you have any questions, please get in touch. We expect several Hackathon teams will be assembled during early February. You can use the Ontolog Summit List (<u>ontology-summit@ontolog.cim3.net</u>) to post your suggestions and call of participants to your team. Also you can use wiki (<u>OntologySummit2014_Hackathon_CommunityInput</u>) or contact the Hackathon organizers to help refine your ideas or look for advise and collaborators.
- Every team lead should provide us with possible project description, will present her project (10 minutes) during February 27th regular Ontology Summit Track E (Hackathon) session, lead his team during actual Hackathon Event 29th of March and provide report of results that will be published on Ontology Summit 2014 website.

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