

## Short CV

### Ondřej Šváb-Zamazal

MSc in Information and Knowledge Engineering from University of Economics, Prague (UEP) in 2006. Bc in Applied Informatics at UEP in 2004. From September 2006 PhD student and part-time research assistant at the Department of Information and Knowledge Engineering, UEP. From March to September 2009 research internship at INRIA, Rhone-Alpes, France in EXMO team. From October 2009 researcher in Laboratory of Intelligent Systems Prague.

Areas of interest: ontology alignment, uncertainty in ontologies, semantic web query languages, knowledge discovery, information extraction, expert systems and programming.

### Awards:

- 2006: the Award for excellent student – *Josef Hlavka Foundation's award*.
- 2007: the Rector' Annual Prize for PhD Student Publications
- 2008: the Dean's Award for Best Doctoral Publication (2<sup>nd</sup> place)

### Participation in EU projects:

- IST FP6 „Knowledge Space of Semantic Inference for Automatic Annotation and Retrieval of Multimedia Content“ (K-Space), 2006-2008
- IST FP6-507482 (Network of Excellence) „Knowledge Web“, 2004-2007.
- eContent #22 249 „M-CAST“, 2005-2006

### Participation in Czech Science Foundation projects:

- 201/03/1318 – „Intelligent analysis of WWW content and structure“

### Teaching Experience:

Informatics – general introduction course of Informatics for students at University of Economics

Information and Communication Network – Practical seminars about protocols of Internet

Introduction to Artificial Intelligence – Practical seminars with two particular expert systems

### PhD Topic:

My topic is related to Ontology Mapping. So far I have tried to use Bayesian Networks for combining diverse ontology mapping methods [12,14]. My current work lies in finding (manual or automatic) design patterns (structural patterns related to modelling styles, naming conventions) in ontologies and their exploitation for Ontology Mapping tasks. Currently, I mainly work with name patterns [7],[8],[9]. Second, I work with mapping patterns that can emerge in ontology mapping results, their automatic detection and analysis can reveal some more deep information about ontology mapping systems [3,11]; and thus it is useful for evaluation (the OAEI). My current and future work goes out from [2,5] and is related to “Ontology Matching via Pattern-based Detection of Semantic Structures in OWL Ontologies” [1,4].

### Selected Publications:

- [1] Šváb-Zamazal O., Svátek V: Towards Ontology Matching via Pattern-Based Detection of Semantic Structures in OWL Ontologies. Znalosti 2009, Czecho-Slovak Annual Conference on Knowledge Technology.
- [2] Šváb-Zamazal O., Svátek V., Meilicke Ch., Stuckenschmidt H.: Testing the impact of pattern-based ontology refactoring on ontology matching results. OM-2008 at ISWC-2008.
- [3] Caracciolo C., Euzenat J., Hollink L., Ichise R., Isaac A., Malaisé V., Meilicke Ch., Pane J., Shvaiko P., Stuckenschmidt H., Šváb-Zamazal O., Svátek V.: First results of the Ontology Alignment Evaluation Initiative 2008. OM-2008 at ISWC-2008.

- [4] Svátek V., Vacura M., Ralbovský M., Šváb-Zamazal O., Parsia B.: OWL Support for (Some) Non-Deductive Scenarios of Ontology Usage. OWLED 2008.
- [5] Šváb-Zamazal O., Svátek V.: Analysing Ontological Structures through Name Pattern Tracking. EKAW 2008.
- [6] Svátek V., Šváb O.: Towards Retrieving Scholarly Literature via Ontological Relationships. Znalosti 2008, Czecho-Slovak Annual Conference on Knowledge Technology.
- [7] Šváb O.: Exploiting Patterns in Ontology Mapping. Doctoral Consortium at ISWC-2007.
- [8] Šváb O., Svátek V.: In vitro study of mapping method interactions in a name pattern landscape. OM-2007 at ISWC-2007.
- [9] Svátek V., Šváb O.: Tracking Name Patterns in OWL Ontologies. EON-2007 at ISWC-2007.
- [10] Jérôme Euzenat, Antoine Isaac, Christian Meilicke, Pavel Shvaiko, Heiner Stuckenschmidt, Ondřej Šváb, Vojtěch Svátek, Willem Robert van Hage, Mikalai Yatskevich: First results of the Ontology Alignment Evaluation Initiative 2007. OM-2007 at ISWC-2007.
- [11] Šváb, O., Svátek, V., Stuckenschmidt H. A Study in Empirical and 'Casuistic' Analysis of Ontology Mapping Results. Accepted for ESWC-2007.
- [12] Šváb, O., Svátek, V.: Ontology Mapping enhanced using Bayesian Network. In: Znalosti 2007, Czecho-Slovak Annual Conference on Knowledge Technology.
- [13] Smrž P., Vacura M., Šváb O.: Uncertainty Extensions to Ontologies as a Tool for Semantic Interpretation in Audiovisual Systems. In: Poster Session of SAMT 2006 - Int'l Conf. on Semantics and Multimedia Technology, Athens, 2006.
- [14] Šváb, O., Svátek, V.: Combining Ontology Mapping Methods Using Bayesian Networks. In: International Workshop on Ontology Matching collocated with the 5th International Semantic Web Conference ISWC-2006, November 5, 2006: GA Center, Athens, Georgia, USA.
- [15] Euzenat, J., Mochol, M., Shvaiko, P., Stuckenschmidt, H., Šváb, O., Svátek, V., van Hage, W. R., Yatskevich, M.: First Results of the Ontology Alignment Evaluation Initiative 2006. In: International Workshop on Ontology Matching collocated with the 5th International Semantic Web Conference ISWC-2006, November 5, 2006: GA Center, Athens, Georgia, USA.
- [16] Šváb O., Svátek V.: OntoFarm: kolekce paralelních ontologií pro experimenty s nástroji sémantického webu. In: Znalosti 2006, Czecho-Slovak Annual Conference on Knowledge Technology.
- [17] Šváb O., Svátek V., Berka P., Rak D., Tomášek P.: OntoFarm: Towards an Experimental Collection of Parallel Ontologies. In: Poster Track of the International Semantic Web Conference, ISWC 2005, Galway.
- [18] Labský M., Svátek V., Šváb O., Praks P., Krátký M., Snášel V.: Information Extraction from HTML Product Catalogues: from Source Code and Images to RDF. In: 2005 IEEE/WIC/ACM International Conference on Web Intelligence (WI'05), IEEE Computer Science, 2005.
- [19] Labský M., Svátek V., Praks P., Šváb O.: Information extraction from HTML product catalogues: coupling quantitative and knowledge-based approaches. In: Dagstuhl Seminar on Machine Learning for the Semantic Web, 2005.
- [20] Labský M., Praks P., Svátek V., Šváb O.: Multimedia information extraction from HTML product catalogues. In: Workshop on Databases, Texts, Specifications and Objects (DATESO'05), Ostrava 2005.
- [21] Šváb O., Svátek V.: propojení nástrojů pro extrakci informací z webových sídel. In: Znalosti 2005, Czecho-Slovak Annual Conference on Knowledge Technology.
- [22] Šváb O., Labský M., Svátek V.: RDF-Based Retrieval of Information Extracted from Web Product Catalogues. In: Semantic Web workshop at ACM SIGIR 2004, Sheffield, 2004.
- [23] Šváb O., Svátek V., Kavalec M., Labský M.: Querying the RDF: Small Case Study in the Bicycle Sale Domain. In: Workshop on Databases, Texts, Specifications and Objects (DATESO'04).
- [24] Labský M., Svátek V., Šváb O.: Types and Roles of Ontologies in Web Information Extraction. In: ECML/PKDD04 Workshop on Knowledge Discovery and Ontologies, Pisa 2004.

**Contact:** [ondrej.zamazal@vse.cz](mailto:ondrej.zamazal@vse.cz)