

# Curriculum Vitae et Studiorum

## 1. Personal Data (Dati Personali)

Name: (Nome:)	Weronika T. Adrian
Date and Place of Birth: (Data e Luogo di Nascita:)	14.01.1985 Krakw
Citizenship: (Cittadinanza:)	Polish
Family Status: (Stato Civile:)	Married
Current Position (if applicable): (Posizione Attuale (se applicabile):)	Research and Teaching Assistant at AGH University of Science and Technology in Krakw
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## 2. Degrees (Titoli di Studio)

Date (Data)	School/Institution/University, Degree, Grade (Scuola/Istituto/Universita, Titolo, Voto)
2009	AGH University of Science and Technology in Krakw, Master of Science in Applied Computer Science, Excellent

## 3. Education (Formazione)

Period (Periodo)	Institution/University, Course (Istituzione/Universita, Corso)
October - December 2011	Stanford University - Stanford Center for Professional Development: Science Management Commercialization; a course designed for the Top 500 Innovators program
2010 - 2011	Dominican Studies of Philosophy and Theology
2004 - 2009	AGH University of Science and Technology in Krakw, Applied Computer Science
2000 - 2004	1st Nowodworski High School in Cracow: math+science+informatics
1992 - 2000	Comprehensive Primary Music School in Cracow: main instruments: piano, percussion

## 4. University Curriculum (Curriculum Universitario)

Master thesis: Visual Rule Design Methods for Semantic Web Applications

Abstract:

The goal of the work presented in this thesis is to enable well-founded methodologies developed for rule-based systems to work for Semantic Web applications. In particular, this includes visual rule design methods developed within the HeKatE project. The aim of the research is to allow using of the XTT<sup>2</sup> rule design framework for the Semantic Web. This would open up possibility to use the visual design tools for XTT<sup>2</sup> for the design of the Semantic Web rules, as well as exploit the existing verification solutions. The primary goal of this thesis is to lay the foundations for an integration of the HeKatE methodology and the Semantic Web. The secondary goal is to consider translations of the rules, based on the concept of serialization, and thus allow for the rule interchange between HeKatE and the Semantic Web applications. In this thesis a proposal of a new inference scheme for the Semantic Web is formulated. A bridging theory and a transition proposal between Description Logics and Attributive Logic is presented in a form of a new rule language. The proposal is then evaluated and illustrated with an example. The approach based on the idea of knowledge serialization and rule interchange is discussed. Translators between different rule formats are presented, analyzed and evaluated.

## 5. Grants and Awards (if applicable) (Borse di Studio e Premi (Eventuali))

Period/Date (Periodo/Data)	Grant/Award (Borsa di Studio/Premio)
2013	AGH UST research grant for young scientists
2013	AGH-UST Rector's Prize for Didactic Achievements in 2012 for the organization of the Engineering of Intelligent Systems (EIS) program in computer science (Team Award)
2012	AGH UST research grant for young scientists
2011	AGH UST research grant for young scientists
2009	Best paper award at the ICCCI2009, together with Grzegorz J. Nalepa, for the paper Proposal of a New Rule-based Inference Scheme for the Semantic Web Applications, published in "New Challenges in Computational Collective Intelligence Series: Studies in Computational Intelligence", Vol. 244, Nguyen, Ngoc Thanh; Katarzyniak, Radoslaw; Janiak, Adam (Eds.), Springer, 2009.
2009	Distinction by Polish Information Processing Society in the XXVI Contest for The Best M.Sc. Thesis in Computer Science, for my MSc Thesis entitled Visual Rule Design Methods for Semantic Web Applications supervised by Grzegorz J. Nalepa

## 6. Professional Experience (if applicable) (Esperienza Professionale (se presente))

Period (Periodo)	Employer (Datore di Lavoro)
since 1.10.2009	research and teaching assistant at Institute of Applied Computer Science, (previously: Computer Science Laboratory in Institute of Automatics), AGH University of Science and Technology in Krakw.
1.01.2013 - 30.06.2013	lecturer at Institute of Philosophy, Jagiellonian University in Krakw; "Creativity Workshop" course for philosophy and cognitive science students
1.01. - 31.03.2013	project trainee in Nitarch company; SPiN - Skuteczny Przedsiębiorca i Naukowiec program for fostering entrepreneurship among scientists
1.01. - 30.06.2011	project trainee in Softhis company ( introducing the Semantic Web concepts to the employees and analyzing the possibilities of integrating semantic technologies into the company system); Wiedza i Praktyka POKL programme for scientists-business cooperation (coordinated by MARR SA)
1.10.2009 - 30.09.2010	lecturer at postgraduate studies at ZOD AGH in Mielec; IT2EDU POKL programme preparing IT and Engineering staff for teaching their professional subjects
1.10.2008 - 30.06.2009	research assistant intern in Computer Science Laboratory in Institute of Automatics, AGH University of Science and Technology in Cracow
1.08.2008 - 30.09.2009	web developer/programmer (php, mysql, ajax, js, html, css) in Team International (internship), HolidayCheck AG in Bottighofen, Switzerland
1.09.2006 - 31.01.2008	IT teacher, International School of Krakw
1.09.2006 - 30.06.2008	network administrator, International School of Krakw

## 7. Teaching Experience (if applicable) (Esperienza Didattica (se presente))

List courses and the respective teaching role.

1. Introduction to Unix/GNU/Linux [PL] → teaching laboratory classes, 1st year of undergraduate CS studies
2. Algorithms and Data Structures [PL] → program preparation, teaching classes, 1st year of undergraduate CS studies
3. Operating Systems [PL] → program preparation, teaching laboratory classes, 3rd year of undergraduate CS studies
4. Knowledge Engineering Basics [PL] → teaching laboratory classes, 1st year of graduate CS studies
5. Languages of Artificial Intelligence [PL] → teaching laboratory classes, 1st year of graduate Automatics and Robotics studies
6. Semantic web Technologies [EN] → syllabus and program preparation, teaching laboratory classes, lecturing, 2nd year of graduate CS studies
7. Creativity Workshop [PL] → syllabus and program preparation, teaching classes, 1st year of graduate CS studies
8. Creativity Workshop [PL] → syllabus and program preparation, teaching classes and lecturing, philosophy and cognitive science studies
9. Information Technology [PL] (Web Development, Databases, Office software and more) → syllabus and program preparation, teaching classes, lecturing, supervision of diploma theses, postgraduate studies
10. Computer Science (Web Development, Programming in Java) [EN] → teaching classes, high school
11. Information and Communication Technology [EN] → syllabus and program preparation, teaching classes, middle-school, primary school, preschool, nursery

## 8. Participation in Projects (if applicable) (Partecipazione a Progetti (se presente))

Period (Periodo)	Project	Contribution
2012 - 2015	Prosecco (Grant NCBiR 1. Program Bada Stosowanych, no. PBS1/B3/14/2012) Processes Semantics & Collaboration for Companies.	ontology engineering, organization help
2009 - 2015	INDECT (FP7-218086, FP7: Collaboration/Security) Intelligent information system supporting observation, searching and detection for security of citizens in urban environment.	collaborative knowledge engineering, technical support with a prototype system
2010 - 2012	BIMLOQ (Grant MNiSW N516 422338) Business Models Optimization for Quality	collaborative knowledge engineering (semantic wikis)
2007 - 2009	HeKatE (Grant MNiSW N516 024 32/2878) Hybrid Knowledge Engineering	Semantic Web technologies, integrating Attributive Logic and Description Logics, integrating rule engine and ontology reasoner

## 9. Publications (if applicable) (Pubblicazioni (se presenti))

- [1] Weronika T. Adrian. Knowledge representation, modelling and processing in modern semantic systems. *PAR Pomiar Automatyka Robotyka*, 15(12):223–225, 2011. ISSN 1427-9126.
- [2] Weronika T. Adrian, Szymon Bobek, Grzegorz J. Nalepa, Krzysztof Kaczor, and Krzysztof Kluza. How to reason by HeaRT in a semantic knowledge-based wiki. In *Proceedings of the 23rd IEEE International Conference on Tools with Artificial Intelligence, ICTAI 2011*, pages 438–441, Boca Raton, Florida, USA, November 2011.
- [3] Weronika T. Adrian, Przemyslaw Cikowski, Krzysztof Kaczor, Antoni Ligza, and Grzegorz J. Nalepa. Web-based knowledge acquisition and management system supporting collaboration for improving safety in urban environment. In Andrzej Dziech and Andrzej Czyewski, editors, *Multimedia Communications, Services and Security: 5th International Conference, MCSS 2012: Krakow, Poland. May 31-June 1, 2012. Proceedings*, volume 287 of *Communications in Computer and Information Science*, pages 1–12, 2012.
- [4] Weronika T. Adrian, Antoni Ligza, and Grzegorz J. Nalepa. Inconsistency handling in collaborative knowledge management. In Maria Ganzha, Leszek A. Maciaszek, and Marcin Paprzycki, editors, *Proceedings of the Federated Conference on Computer Science and Information Systems – FedCSIS 2013, Krakow, Poland, 8-11 September 2013*, pages 1261–1266. IEEE, 2013.
- [5] Weronika T. Adrian and Grzegorz J. Nalepa. Loki – presentation of logic-based semantic wiki. In Joaquin Canadas, Grzegorz J. Nalepa, and Joachim Baumeister, editors, *7th Workshop on Knowledge Engineering and Software Engineering (KESE2011) at the Conference of the Spanish Association for Artificial Intelligence (CAEPIA 2011): November 10, 2011, La Laguna (Tenerife), Spain*, page 52, 2011.
- [6] Weronika T. Adrian, Grzegorz J. Nalepa, Krzysztof Kaczor, and Marta Noga. Overview of selected approaches to rule representation on the Semantic Web. *Technical Report CSLTR 2/2010*, AGH University of Science and Technology, 2010.
- [7] Weronika T. Adrian, Grzegorz J. Nalepa, and Antoni Ligza. On potential usefulness of inconsistency in collaborative knowledge engineering. In *Proceedings of the 8th International Conference on Knowledge, Information and Creativity Support Systems*, 2013.

- [8] Weronika T. Adrian, Jarosław Waliszko, Antoni Ligza, Grzegorz J. Nalepa, and Krzysztof Kaczor. Description logic reasoning in an ontology-based system for citizen safety in urban environment. In Eunika Mercier-Laurent [et al.], editor, *AI4KM 2012 : 1st international workshop on Artificial Intelligence for Knowledge Management at the biennial European Conference on Artificial Intelligence (ECAI 2012)*: August 28, 2012, Montpellier, France, pages 63–67, 2012.
- [9] Szymon Bobek and Weronika T. Adrian. Context awareness in learning human habits. In *ICSEA 2012 : the seventh International Conference on Software Engineering Advances*, page 98-101, 2012.
- [10] Szymon Bobek, Weronika T. Furmaska, Krzysztof Kaczor, Krzysztof Kluza, Agata Ligza, Antoni Ligza, and Grzegorz J. Nalepa. HeKatE: Hybrydowe podejście do inżynierii systemów ekspertowych: metodologia, projektowanie, narzędzia. In Jerzy Gouchowski and Barbara Filipezyk, editors, *Wiedza i komunikacja w innowacyjnych organizacjach: systemy ekspertowe – wczoraj, dziś, jutro*, *Prace Naukowe Uniwersytetu Ekonomicznego w Katowicach*, pages 57–68. Katowice: Wydawnictwo Uniwersytetu Ekonomicznego, 2010. ISBN 978-83-7246-601-3.
- [11] Szymon Bobek, Krzysztof Kaczor, Krzysztof Kluza, and Weronika T. Adrian. Edycja i kontrola jakości wiedzy w systemach regułowych. In Magorzata Pakowska, editor, *Wiedza i komunikacja w innowacyjnych organizacjach*, *Prace Naukowe Uniwersytetu Ekonomicznego w Katowicach*, pages 11–29, 2011.
- [12] Szymon Bobek, Grzegorz J. Nalepa, and Weronika T. Adrian. Mobile context-based framework for monitoring threats in urban environment. In Andrzej Dziech and Andrzej Czyewski, editors, *Multimedia Communications, Services and Security: 6th International Conference, MCSS 2013: Kraków, Poland. June 6-7, 2013. Proceedings*, volume 368 of *Communications in Computer and Information Science*. Springer Berlin Heidelberg, 2013.
- [13] Weronika T. Furmaska and Grzegorz J. Nalepa. Design process ontology – approach proposal. In Joachim Baumeister and Grzegorz J. Nalepa, editors, *5th Workshop on Knowledge Engineering and Software Engineering (KESE2009) at the 32nd German conference on Artificial Intelligence: September 15, 2009, Paderborn, Germany*, pages 25–32, Paderborn, Germany, 2009.
- [14] Weronika T. Furmaska and Grzegorz J. Nalepa. Nowe metody reprezentacji reguł dla sieci semantycznej. In Adam Grzech and et al., editors, *Inżynieria Wiedzy i Systemy Ekspertowe, Problemy Współczesnej Nauki, Teoria i Zastosowania. Informatyka*, pages 265–275, Warszawa, 2009. Akademyka Oficyna Wydawnicza EXIT.
- [15] Weronika T. Furmaska and Grzegorz J. Nalepa. Review of selected Semantic Web technologies. Technical Report CSLTR 6/2009, AGH University of Science and Technology, 2009.
- [16] Krzysztof Kluza, Weronika T. Adrian, Antoni Ligza, Grzegorz J. Nalepa, Marcin Szpyrka, Krzysztof Kaczor, and Szymon Bobek. Metody modelowania, oceny jakości oraz weryfikacji reguł i procesów biznesowych. In Magorzata Pakowska, editor, *Wiedza i komunikacja w innowacyjnych organizacjach*, *Prace Naukowe Uniwersytetu Ekonomicznego w Katowicach*, pages 182–207, 2011.
- [17] Antoni Ligza, Weronika T. Adrian, and Przemysław Cikowski. Towards collaborative knowledge engineering for improving local safety in urban environment. In Joaquin Canadas, Grzegorz J. Nalepa, and Joachim Baumeister, editors, *8th Workshop on Knowledge Engineering and Software Engineering (KESE2012) at the biennial European Conference on Artificial Intelligence (ECAI 2012)*: August 28, 2012, Montpellier, France, pages 58–61, 2012.
- [18] Antoni Ligza, Weronika T. Adrian, Sebastian Ernst, Grzegorz J. Nalepa, Marcin Szpyrka, Michał Czapko, Paweł Grzesiak, and Marcin Krzych. Prototypes of a web system for citizen provided information, automatic knowledge extraction, knowledge management and GIS integration. In Andrzej Dziech and Andrzej Czyewski, editors, *Multimedia Communications, Services and Security*, volume 149 of *Communications in Computer and Information Science*, pages 268–276. Springer Berlin Heidelberg, 2011.
- [19] Antoni Ligza, Weronika T. Adrian, Krzysztof Kaczor, Grzegorz J. Nalepa, Przemysław Cikowski, Maciej Wywio, and Paweł Grzesiak. Web system for citizen provided information, automatic knowledge extraction, knowledge management and GIS integration. INDECT D4.14 technical report.
- [20] Antoni Ligza, Weronika T. Adrian, Krzysztof Kaczor, Grzegorz J. Nalepa, Przemysław Cikowski, Maciej Wywio, and Paweł Grzesiak. Web system for citizen provided information, automatic knowledge extraction, knowledge management and GIS integration. INDECT D9.30 technical report.

- [21] Antoni Ligza, Krzysztof Kluza, Grzegorz J. Nalepa, Weronika T. Adrian, and Tomasz Potempa. Artificial intelligence for knowledge management with bpmn and rules. In Eunika Mercier-Laurent [et al.], editor, AI4KM 2012 : 1st international workshop on Artificial Intelligence for Knowledge Management at the biennial European Conference on Artificial Intelligence (ECAI 2012): August 28, 2012, Montpellier, France, pages 27–32, 2012.
- [22] Grzegorz J. Nalepa, Weronika T. Adrian, Szymon Bobek, and Piotr Malanka. Combining AceWiki with a CAPTCHA system for collaborative knowledge acquisition. In ICTAI 2012: 24th IEEE International Conference on Tools with Artificial Intelligence : November 7-9, 2012, Athens, Greece, pages 405–410, 2012.
- [23] Grzegorz J. Nalepa and Weronika T. Furmaska. Design Process Ontology – Approach Proposal. In KESE, 2009.
- [24] Grzegorz J. Nalepa and Weronika T. Furmaska. New challenges in computational collective intelligence. Studies in Computational Intelligence, chapter Proposal of a New Rule-based Inference Scheme for the Semantic Web Applications, pages 15–26. Springer, 2009. 1st International Conference on Computational Collective Intelligence - Semantic Web, Social Networks & Multiagent Systems.
- [25] Grzegorz J. Nalepa and Weronika T. Furmaska. Review of semantic web technologies for GIS. *Automatyka: procznik Akademii Gorniczo-Hutniczej im. Stanisawa Staszica w Krakowie*, 13(2):485–492, 2009.
- [26] Grzegorz J. Nalepa and Weronika T. Furmaska. Integration proposal for description logic and attributive logic – towards Semantic Web rules. In Ngoc Thanh Nguyen and Ryszard Kowalczyk, editors, Transactions on Computational Collective Intelligence II, volume 6450 of Lecture Notes in Computer Science, pages 1–23. Springer Berlin / Heidelberg, 2010.
- [27] Grzegorz J. Nalepa and Weronika T. Furmaska. Pellet-HeaRT – proposal of an architecture for ontology systems with rules. In Rüdiger Dillmann and et al., editors, KI 2010: Advances in Artificial Intelligence: 33rd annual German conference on AI: Karlsruhe, Germany, September 21-24, 2010, volume 6359 of Lecture Notes in Artificial Intelligence, pages 143–150, Berlin; Heidelberg, 2010. Springer-Verlag.
- [28] Joanna Pniewska, Weronika T. Adrian, and Anna Czerwoniec. Prototyping: is it a more creative way for shaping ideas. In Proceedings of the International Conference on Multimedia, Interaction, Design and Innovation, MIDI '13, pages 18:1–18:8, New York, NY, USA, 2013. ACM.
- [29] Jarosław Waliszko, Weronika T. Adrian, and Antoni Ligza. Traffic danger ontology for citizen safety web system. In Andrzej Dziech and Andrzej Czyewski, editors, Multimedia Communications, Services and Security, volume 149 of Communications in Computer and Information Science, pages 165–173. Springer Berlin Heidelberg, 2011.

## 10. Other (Altro)

- I am a founder member of Polish Artificial Intelligence Society (<http://pssi.org.pl>)
- I am a co-founder and a leader of Creative Cracow group ([facebook.com/CreativeCracow](https://www.facebook.com/CreativeCracow))
  - We organize open events (e.g., urban games) and creativity workshops in cafés in Krakw
  - We cooperate with start-up community and U.S. Consulate General in Krakw
  - We develop a methodology for creative thinking and acting based on Stanford methods and international experience of the team
  - We cooperate with initiative such as MakerSpace Krakw, Hackerspace, MediaLab. I served as a mentor in interdisciplinary projects that tackle social challenges of local community.
- I cooperate with Civic Congress that is a Polish think-tank. Recently, I was invited as a panelist to 8th Civic Congress to share my thoughts on modernization of Poland