Jelena Graovac

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dr Jelena Graovac
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Date and Place of Birth

December 14, 1979, Pristina, Serbia

Education

2008–2014 PhD Studies at the Department of Computer Science, Faculty of Mathematics, University of Belgrade. PhD thesis "Contribution to text categorization methods: mathematical models and applications" under supervision of prof. Gordana Pavlović-Lažetić.

2005–2008 MSc at the Department of Computer Science, Faculty of Mathematics, University of Belgrade, Grade point average 10.0 (out of 10.0). Master thesis "XML database management of lexical resources", under supervision of prof. dr Gordana Pavlović-Lažetić.

1999–2004 Department of Computer Science, Faculty of Mathematics, University of Belgrade. Grade point average 9.62 (out of 10.00).

Awards and Honors

2002–2004 Scholarship "Support for Youth in Sciences Foundation of the Republic of Serbia".

2002 Norwegian government Scholarship as one of the top 500 students in Serbia.

Positions

2015–today Assistant professor at the Department for Computer Science, Faculty of Mathematics, University of Belgrade.

2004–2015 Teaching assistant at the Department for Computer Science, Faculty of Mathematics, University of Belgrade.

Courses:

- Object-oriented programming (Programming language Java)

- Introduction to Computer Systems (Programming language C++)

- Information Systems, Database design

- Programming 1 (Programming language C)

- Programming 2 (Programming language C)

- Introduction to Programming (Programming language C)

2009/10 and 2011/12 on maternity leave.

Participation in research projects

2011–today Research project III47003 "INTELIS - Infrastructure for Technology Enhanced Learning in Serbia", supported by the Ministry of Science of the Republic of Serbia.

2006–today Research project 144030 "Automated Reasoning and Data Mining", supported by the Ministry of Science of the Republic of Serbia.

2005 Research project 1858 "Bioinformatics", supported by the Ministry of Science of the Republic of Serbia.

Research Interests

Text processing (textual databases, text classification, information retrieval), XML databases.

Bibliography

- PhD thesis, *Contribution to text categorization methods: mathematical models and applications*, May 2014.

  url: http://www.matf.bg.ac.rs/~jgraovac/publications/jg_phd.pdf

- Master Thesis, *XML database management of lexical resources*, September 2008.

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Selected papers

- J. Graovac, J. Kovačević, G. Pavlović-Lažetić, *Language Independent n-Gram-Based Text Categorization with Weighting Factors: A Case Study*, **JIDM - Journal of Information and Data Management**, Accepted for publication, 2015.

- J. Graovac, *A variant of n-gram based language-independent text categorization*, **Intelligent Data Analysis**, Vol. 18, No. 4, pages 677–695, 2014.

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- J. Graovac, *Wordnet-based text categorization technique.* **INFOtheca - Journal of Information and Library Science**, Vol. 14, No. 2, pages 2–17, 2014.

  url: http://infoteka.unilib.rs/2013/br.2/eng/Infotheca-2-2013-Jelena-Graovac.pdf

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- M. Vujošević-Janičić, J. Tomašević, P. Janičić, *Random k-GD-SAT Model and its Phase Transition*, **Journal of Universal Computer Science**, Volume 13, Issue 4, pages 572–591, 2007.

  url: http://www.jucs.org/jucs_13_4/random_k_gd_sat

- P. Quaresma, P. Janičić, J. Tomašević, M. Vujošević-Janičić, D. Tošić, *XML-based Format for Descriptions of Geometrical Constructions and Geometrical Proofs*, **Communicating Mathematics in Digital Era, CMDE 2006**, Aveiro, Portugal, August 15-18, 2006.

  url: http://www.matf.bg.ac.rs/~jgraovac/publications/xmlFG.pdf

- M. Živković, S. Malkov, S. Zarić, M. Vujošević-Janičić, J. Tomašević, G. Predović, N. Blažić, M. V. Beljanski, *Statistical Dependence of Protein Secondary Structure on Amino Acid Bigrams*, **Chemical Industry and Chemical Engineering Quarterly**, 12(1), 82, pages 82–85, 2006.

  url: http://www.matf.bg.ac.rs/~jgraovac/publications/sdp.pdf

- J. Graovac, G. Pavlović-Lažetić, *Language-Independent Sentiment Polarity Detection in Movie Reviews: A Case Study of English and Spanish*, **6th International Conference ICT Innovations 2014**, Web Proceedings ISSN 1857-7288, pages 13–22, Ohrid, Macedonia, 2014.

  url: http://poincare.matf.bg.ac.rs/~jgraovac/publications/jgSPD.pdf

- J. Graovac, *Text categorization using n-gram based language independent technique*, **35th Anniversary of Computational Linguistics in Serbia**, Book of Abstracts, to appear in the Proceedings of the Conference, 2013.

- J. Graovac, *Serbian text categorization using byte level n-grams*, **In Proceedings of CLoBL 2012: Workshop on Computational Linguistics and Natural Language, 5th Balkan Conference in Informatics**, ISBN: 978-86-7031-200-5, pages 93–97, Novi Sad, Serbia, 2012.

  url: http://www.matf.bg.ac.rs/~jgraovac/publications/stcbn.pdf

- G. Pavlović-Lažetić, J. Tomašević, *Ontology-driven conceptual document classification*, **KDIR 2010 - International Conference on Knowledge Discovery and Information Retrieval**, 25-28 10, Valencia, Spain; In Proceedings of the International Conference on Knowledge Discovery and Information Retrieval, pages 383–386, 2010.

  url: http://www.matf.bg.ac.rs/~jgraovac/publications/odcdc.pdf

- J. Tomašević, G. Pavlović-Lažetić, *Productivity of concepts in Serbian Wordnet*, in Proceedings of the **11th International Multiconference INFORMATION SOCIETY - IS 2008** Volume C: Proceedings of the Sixth Language Technologies Conference, EDs. Tomaž Erjavec, Jerneja Žganec Gros, Oct. 16th - 17th, 2008, Ljubljana, Slovenia, pages 86–91, 2008.

  url: http://nl.ijs.si/is-ltc08/IS-LTC08-Proceedings.pdf

- J. Tomašević, M. Vujošević-Janičić, *TemidaLib – Multiprecision Arithmetic Library*, Zbornik radova **SYMOPIS 2006**, Banja Koviljača, 2006.

- M. Vujošević-Janičić, J. Tomašević, *Phase Transition In Random SAT Problems*, Zbornik radova **SYMOPIS 2006**, Banja Koviljača, 2006.

- M. Vujošević-Janičić, J. Tomašević, M. Živković, S. Malkov, G. Predović, N. Blažić, M. V. Beljanski, S. Zarić, *Distribution of distances of connected amino acid pairs in proteins*, Poster prikazan na **1st South East European Congress of Chemical Engineering**, Faculty of Technology and Metallurgy, Belgrade, Serbia and Montenegro, 2005.

- Aleksić Tatjana, Denes Attila, Pap Zoltan, Račić Sanja, Radovanović Dragica, Tomašević Jelena, Vla Katarina, *Optimal crop distribution in Vojvodina*, **Proceedings of the Modelling Week**, Novi Sad, Srbija, 2005.

Submitted papers:

- J. Graovac, G. Pavlović-Lažetić, *Language-independent n-gram-based text categorization: facing the challenge of different natural language paradigms.*

- J. Graovac, J. Kovačević, G. Pavlović-Lažetić, *Hierarchical vs. flat n-gram-based text categorization: can we do better?*

- J. Kovačević, J. Graovac, *SVM based hierarchical text classification in Serbian.*

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