
Education

- August 2011 **European Summer School of Language, Logic and Technology.**
- Sept. 2009 – July 2011 **M.Sc. in Computer Science**, *University of Zagreb, Faculty of Electrical Engineering and Computing, Knowledge Technologies Laboratory*, GPA 4.533 (5.00 scale).
Thesis title *Computational Models of Distributional Lexical Semantics for Croatian Language*
Supervisors Assist. Prof. Jan Šnajder, Ph.D., Prof. Bojana Dalbelo-Bašić, Ph.D.
- Sept. 2006 – July 2009 **B.Sc. in Computer Science**, *University of Zagreb, Faculty of Electrical Engineering and Computing, Consumer Computing Laboratory*, GPA 3.697 (5.00 scale).
Thesis title *Operating systems simulation gadgets*
Supervisor Prof. Siniša Sribljčić, Ph.D.

Experience

- Sept. 2011 – present **Software engineer**, *In2, Croatia, Zagreb.*
Working on implementation of platform for investment performance attribution analysis
- July 2010 – Sept. 2010 **Software engineer (intern)**, *Ericsson Nikola Tesla, Croatia, Zagreb.*
Research project “Assessment of multicore programming language” during Summer Camp 2010
- July 2009 – Sept. 2009 **Software engineer (intern)**, *Ericsson Nikola Tesla, Croatia, Zagreb.*
Research project “PROTO: Multicore SIP parser” during Summer Camp 2009
- July 2008 – Sept. 2008 **Software engineer (intern)**, *Exor, Croatia, Zagreb.*
Worked on visualizing sets of textual algorithm schemes of semiautomated security procedures for a tunnel traffic control system.

Projects

- 2011 – present **Investment Performance Attribution Analysis**,
In2, Croatia, Zagreb.
Analyzing and implementing algorithms for portfolio performance attribution analysis, in a team of four. Implementation in Oracle DB, Java (Spring) and Adobe Flex.
- 2009 – 2011 **DSM Methods for Measuring Semantic Similarity**,
University of Zagreb, Faculty of Electrical Engineering and Computing, Croatia,
Mentors: Assist. Prof. Jan Šnajder, Ph.D., Prof. Bojana Dalbelo-Bašić, Ph.D.
For M.Sc., worked on research and implementation of distributional semantic models (DSMs) for Croatian language. DSMs dynamically build semantic word representations in the form of multi-dimensional vector spaces through a statistical analysis of the contexts in which words occur. Geometrical relations between vectors correlate with semantic relations between represented words. Implementation in Python.
- 2011 **Hyperlink Constituency**,
Massachusetts Institute of Technology, Department of Linguistics and Philosophy,
Project lead: Michael Yoshitaka Erlewine, <http://constituency.mit.edu>.
Investigating the syntactic notion of constituency by studying inline hyperlinks in a hypertext corpus. A constituent is a word or a group of words that functions as a single unit within a sentence. The project hypothesis is that inline links are constituents in their host sentences. Implementation is based on PHP and MySQL.
- 2011 **Corpus Explorer**,
University of Zagreb, Faculty of Electrical Engineering and Computing, Croatia,
Mentor: Prof. Bojana Dalbelo-Bašić, Ph.D.
Implemented an explorer and visualizer tool for a large corpora set of Croatian journal articles provided by Croatian News Agency, in a team of 5. Used MySQL, C# and WPF.

- 2010 **Assessment of multicore programming languages**,
Ericsson Nikola Tesla d.d., Zagreb, Croatia,
Mentor: Ivan Skuliber, Ph.D..
In a team of 4 worked on evaluating multicore programming libraries for C++ (CILK), Java (JSR-166) and Erlang by implementing and testing parallel text processing, process management and message parsing. Implemented universal GLR parser in Erlang.
- 2009 **Using K-Nearest Neighbor Method for Playing Cards Recognition**,
University of Zagreb, Faculty of Electrical Engineering and Computing, Croatia.
In a team of 4, as part of the Machine Learning course, implemented an image detection and recognition system used for recognizing playing cards. Implementation based on C#.
- 2009 **Neural Network Character Recognition**,
University of Zagreb, Faculty of Electrical Engineering and Computing, Croatia.
Worked in a team of 6 on modeling and implementing handwritten characters recognition system using multilayer neural network as part of the Pattern Recognition Learning course. The implementation was based on C# and OpenCV.
- 2009 **PROTO: Multicore SIP parser**,
Ericsson Nikola Tesla d.d., Zagreb, Croatia,
Mentor: Ivan Skuliber, Ph.D..
Worked in a team of 4 on the design and implementation of a 100% compliant SIP parser for use in multicore processor systems. Implementation was based on C# and XML.

Technical Skills

Programming languages	strong in Java (SE, EE) and Python, experience with Flex, C#, Erlang, PHP, JavaScript
Other technologies	LaTeX, SQL, PL/SQL

Academic Publications

- 5 Sept. 2011 **Random Indexing Distributional Semantic Models for Croatian Language**, Vedrana Janković, Jan Šnajder, Bojana Dalbelo-Bašić, Balto-Slavonic Natural Language Processing 2011
- 15 Sept. 2011 **Multicore SIP Parsing with Imperative and Declarative Implementations**, Ivan Skuliber, Vedrana Janković, Ružica Zec, International Conference on Software, Telecommunications and Computer Networks 2011

Awards

- 2010 Applicability of Multicore Programming Libraries in Parsing awarded as Student project of the year, 1st prize, Ericsson NT, Croatia, Zagreb
- 2009 Multicore SIP awarded as Student project of the year, 1st prize, Ericsson NT, Croatia, Zagreb
- 2006 Croatian State Mathematics Championship 2nd place on final round, state level
- 2006, 2005, 2004 Croatian State Championship in Croatian Language Grammar and Orthography final rounds, state level

Languages

Croatian	mother tongue
English	writing and speaking proficiency, 17 years of studying and active usage, CAE diploma
French	good writing and speaking skills, 9 years of studying and usage, DELF B2 diploma

Interests

- Music DJ-ed at KSET student club (<http://www.kset.org/>), 2007 – 2009
- Journalism student journalist for Panoptikum, student newspaper, University of Zagreb, 2008; proofreading for Pro Tempore, student journal, Faculty of Humanities and Social Sciences, 2010, 2011
- Literature I really love reading
- Other student representative at the Faculty Council, Faculty of Electrical Engineering and Computing, 2008 – 2010