

Svitlana Volkova

CONTACT INFORMATION	Center for Language and Speech Processing Johns Hopkins University 3400 North Charles St Baltimore, MD 21218	Voice: 443 668 0013 E-mail: svitlana.volkova@gmail.com Website: http://www.cs.jhu.edu/~svitlana/ https://www.linkedin.com/in/svitlanavolkova
RESEARCH INTERESTS	<ul style="list-style-type: none">▪ Dynamic streaming models for real-time predictive analytics in social media.▪ Text-driven socio-linguistic content analysis in social networks.▪ Fine-grained, multilingual emotion and sentiment analysis.▪ Effective annotation via crowdsourcing using active learning.▪ Unsupervised learning of dialog systems; subjective language grounding.	
RESEARCH APPLICATIONS	Understanding customers (psycho-demographics profiles) and their attitudes towards products/services (sentiment, emotions), personalization, recommendation systems, targeted advertising, large-scale market segmentations etc.	
EDUCATION	<p>Johns Hopkins University, Center for Language and Speech Processing PhD Candidate, Computer Science 09/2010 – present Advisors: Benjamin Van Durme, David Yarowsky</p> <p>Kansas State University, Manhattan, KS USA M.S., Computer Science 08/2008 – 08/2010 Thesis: Entity Extraction, Animal Disease-Related Event Recognition from Web. Advisors: William H. Hsu, Doina Caragea. GPA: 3.7</p> <p>Petro Mohyla Black Sea State University, Mykolayiv Ukraine M.S. cum Laude, B.S. cum Laude, Computer Science 09/2000 – 03/2006 Thesis: Building a System for Testing Knowledge of Students in Engineering Advisor: Yuriy Kondratenko. GPA: 4.0</p>	
PROFESSIONAL EXPERIENCE	<p>Microsoft Research, Cambridge, UK Research Intern, Machine Learning and Perception Group <i>Mentor: Yoram Bachrach</i> 06/2014 – 09/2014 Developed a demo system (presented at AAAI'15) for automatically inferring psycho-demographics profiles, emotions and sentiments from texts in social media. Studied the correlations between predicted online identities and projected emotions and opinions in online social networks.</p> <p>Microsoft Research, Redmond, WA USA Research Intern, Natural Language Processing Group <i>Mentors: Bill Dolan and Luke Zettlemoyer</i> 05/2012 – 08/2012 Developed a novel approach (presented at ACL'13) for learning dialog systems with light supervision; implemented a system that extracts task knowledge from instructional text and learns a dialog manager over this knowledge.</p> <p><i>Mentor: Bill Dolan</i> 05/2011 – 08/2011 Worked on modeling human-computer interactions in an Xbox domain (presented at ACL'12); managed crowdsourcing of grounded multilingual subjective descriptions of the Xbox avatar images (presented at NAACL'13).</p>	

TECHNICAL SKILLS AND LANGUAGES	<p>Expert knowledge: Machine Learning, Natural Language Processing, Text Analytics, Social Networks, Social Media Analytics, Data Mining, Probability and Statistics, Information Retrieval/Extraction, Artificial Intelligence, Graphs and Optimization</p> <p>Programming: Python, Java, Bash, R, Matlab, SQL, MongoDB and C#.</p> <p>Languages: English (fluent), Russian/Ukrainian (native), French/German (beginner).</p>
PUBLICATIONS	<p>Papers, presentations, posters, demos, code and data: http://www.cs.jhu.edu/~svitlana/</p> <p><i>Online Bayesian Models for Personal Analytics in Social Media.</i> Svitlana Volkova, Benjamin Van Durme. AAAI 2015.</p> <p><i>Inferring Latent User Properties from Texts Published in Social Media (Demo).</i> Svitlana Volkova and Yoram Bachrach. AAAI 2015.</p> <p><i>Improving Gender Prediction of Social Media Users via Weighted Annotator Rationales.</i> Svitlana Volkova and David Yarowsky. NIPS Workshop on Personalization: Methods and Applications 2014.</p> <p><i>Inferring User Political Preferences from Streaming Communications.</i> Svitlana Volkova, Glen Coppersmith, and Benjamin Van Durme. ACL 2014.</p> <p><i>Exploring Demographic Language Variations to Improve Multilingual Sentiment Analysis in Social Media.</i> Svitlana Volkova, Theresa Wilson, and David Yarowsky. EMNLP 2013.</p> <p><i>Lightly Supervised Learning of Procedural Dialog Systems.</i> Svitlana Volkova, Pallavi Choudhury, Chris Quirk. Bill Dolan and Luke Zettlemoyer. ACL 2013.</p> <p><i>Exploring Sentiment in Social Media: Bootstrapping Subjectivity Clues from Multilingual Twitter Streams.</i> Svitlana Volkova, Theresa Wilson, and David Yarowsky. ACL 2013.</p> <p><i>Learning to Relate Literal and Sentimental Descriptions of Visual Properties.</i> Mark Yatskar, Svitlana Volkova. Asli Celikyilmaz, Bill Dolan and Luke Zettlemoyer. NAACL-HLT 2013.</p> <p><i>CLex: A Lexicon for Exploring Color, Concept and Emotion Associations in Language.</i> Svitlana Volkova, Bill Dolan, Theresa Wilson. EACL 2012.</p> <p><i>Boosting Biomedical Entity Extraction by using Syntactic Patterns for Semantic Relation Discovery.</i> Svitlana Volkova et al. IEEE/ACM WI & IAT 2010.</p> <p><i>Computational Knowledge and Information Management in Veterinary Epidemiology.</i> Svitlana Volkova, Doina Caragea et al. IEEE ISIC 2010.</p> <p><i>Animal Disease Event Recognition and Classification.</i> Svitlana Volkova et al. Workshop on Web Science and Information Exchange in Medical Web, WWW 2010.</p> <p>10 more papers published by the Ukrainian National Academy of Science and 15 short papers in conference proceedings: http://svolkova.weebly.com/publications.html</p>
PATENTS	<p><i>Crowdsourced, Grounded Language for Intent Modeling in Conversational Interfaces.</i></p> <p>C. Brockett, P. Choudhury, B. Dolan, Y. C. Ju, P. Pantel, N. Mallory, and S. Volkova.</p>

AWARDS AND DIPLOMAS	2010 – 2011 Google Anita Borg Memorial Scholarship Award 2008 – 2010 Fulbright Graduate Student Scholarship Award
PROFESSIONAL SERVICE	Co-organizer of the Women in Machine Learning Workshop (WiML) 2015. Co-chair of a Joint Workshop on Social Dynamics and Latent Attribute Prediction in Social Media at ACL 2014. Co-chair of the ACL Student Research Workshop 2014. Reviewing for ACL, EACL, NAACL, EMNLP, AAAI and IEEE.
RESEARCH AND TEACHING EXPERIENCE	<p>Johns Hopkins University Baltimore, MD USA</p> <p><i>Research Assistant, Center for Language and Speech Processing</i> 01/2011 – present Developing text-driven models for socio-linguistic content analysis in streaming social media. Past projects: Built batch models for latent demographic attribute prediction in social media for English and Spanish. Built models for sentiment analysis for low-resourced languages and explored gender language differences to improve sentiment prediction for English, Spanish, and Russian.</p> <p><i>Teaching Assistant, Computer Science Department</i> 09/2010 – 12/2010 Machine Learning, Prof. Mark Dredze</p> <p>Kansas State University, Manhattan, KS USA</p> <p><i>Research Assistant, Knowledge Discovery in Databases Laboratory</i> 01/09 – 05/10 Project: Developed a framework for animal disease event recognition and extraction from unstructured web data including news, emails, and blogs.</p> <p>Data Sciences Summer Institute, University of Illinois Urbana-Champaign, IL</p> <p><i>Visiting Student</i> 05/2009 – 07/2009</p> <p>Petro Mohyla Black Sea State University, Mykolayiv Ukraine</p> <p><i>Research Assistant, Medical Equipment and Systems Department</i> 03/2006 – 07/2008 Studied methods to increase reliability and quality of medical expert systems.</p> <p><i>Assistant, Information Systems and Computer Science Department</i> 07/2004 – 03/2006 Taught graduate and undergraduate courses: algorithms and programming languages, operation analysis, web-design, and physics.</p>
INVITED TALKS TUTORIALS	<p>05/31/2015 NAACL Tutorial on Social Media Predictive Analytics, Denver CO</p> <p>04/15/2015 Microsoft Research, Natural Language Processing Group, Redmond WA</p> <p>04/13/2015 Pacific Northwest National Laboratory, Richland WA</p> <p>03/17/2015 Microsoft Research, Machine Learning Group, Cambridge UK</p> <p>03/16/2015 Psychometrics Center, University of Cambridge, Cambridge UK</p> <p>02/18/2015 CLIP Seminar and Guest Lecture, University of Maryland</p> <p>01/30/2015 People Pattern, Austin TX</p> <p>11/13/2014 Penn Positive Psychology Center, World Well-Being Project, Philadelphia</p> <p>11/12/2014 Penn Computational Linguistics Group, Philadelphia</p> <p>11/07/2014 Amazon Fall 2014 Graduate Research Symposium, Seattle</p>

MEMBERSHIPS Fulbright Alumni Association, Association for Computational Linguistics (ACL), Women in Machine Learning (WiML), IEEE Student and Women in Engineering, ACM Student and Women in Computing.
