Curriculum Vitae

Robert J. Reynolds   updated Jun 2017

Assistant Research Professor
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Education:
PhD, Russian Language Technology, Universitetet i Tromsø, Aug 2016
MA, Russian Linguistics, Ohio State University, 2011
BS Psychology and Russian majors, Philosophy minor, Brigham Young University, 2008

Dissertation:
"Russian Natural Language Processing and Computer-assisted Language Learning:
Capturing the benefits of deep morphological analysis in real-life applications"
Advisors: Prof. Laura Janda and Dr. Prof. Detmar Meurers

Research Interests:
Natural Language Processing and Computational Linguistics:
ICALL (intelligent computer-assisted language learning = NLP + CALL)
Automatic morphological analysis and ambiguity resolution
Machine-learning approaches to automatic text readability analysis
Linguistics:
Structure of Russian (morphology, verbal aspect, etc.)
Corpus linguistics

Research:
Peer-reviewed journal articles:
Endresen, Anna, Laura Janda, Robert Reynolds, and Francis Tyers. "Who needs particles?
A challenge to the classification of particles as a part of speech in Russian." *Russian
Linguistics* 40 (2). 2016.
Peer-reviewed proceedings articles:
Reynolds, Robert. "Insights from Russian second language readability classification:
complexity-dependent training requirements, and feature evaluation of multiple
categories." In *Proceedings of the 11th Workshop on Innovative Use of NLP for Building
Educational Applications*, pp. 289–300. 2016. San Diego, California.
Reynolds, Robert and Francis Tyers. "Automatic word stress annotation of Russian
unrestricted text." In *Nordic Conference of Computational Linguistics NODALIDA 2015*,
p. 173. 2015.
Tyers, Francis and Robert Reynolds. 2015. "A preliminary constraint grammar for Russian."
In *Proceedings of the Workshop on "Constraint Grammar – methods, tools,
applications" at NODALIDA 2015*. Vilnius, Lithuania.

Reynolds, Robert, Eduard Schaf and Detmar Meurers. 2014. "A VIEW of Russian: Visual Input Enhancement for a Morphologically Rich Language." In *Proceedings of 3rd workshop on NLP for computer-assisted language learning*. Uppsala, Sweden.

Reynolds, Robert. 2014. "Automatic Evaluation of Potential Targets for Textual Enhancement: Identifying Optimal Sentences for Learner Uptake." In *Research Challenges in CALL. Proceedings of the Sixteenth International CALL Conference*, edited by Jozef Colpaert, Ann Aerts, and Margret Oberhofer, 365. Antwerp: University of Antwerp.

Reynolds, Robert. 2013. "Are Russian prefixes out of order?: Complexity-Based Ordering and template morphology." *University of Pennsylvania Working Papers in Linguistics* 19 (1). ISSN 1524-9549.s 158 - 168.

Presentations:

Reynolds, Robert. 2016. "Russian computer-assisted language learning and artificial intelligence: automatic morphological analysis and disambiguation." presented at *The 11th Slavic Linguistics Society Annual Meeting*. Sept 23-25, Toronto, Canada.

Reynolds, Robert. 2016. "Computer Assisted Language Learning and Artificial Intelligence: A Case Study With Russian Morphology" presented at *Language Acquisition Research Colloquium*. Sept 21, Provo,UT.

Janda, Laura, Hanne Eckhoff, Olga Lyashevskaya, Robert Reynolds. 2016. "How learnable is Russian aspect?" presented at *Time and Language, organized by the Linguistic Association of Finland.* August 25-26, Turku, Finland.

Reynolds, Robert. 2016. "Insights from Russian second language readability classification: complexity-dependent training requirements, and feature evaluation of multiple categories." presented at *The 11th Workshop on Innovative Use of NLP for Building Educational Applications.* June 16, San Diego, California.

Tyers, Francis, Anna Endresen, Robert Reynolds and Laura Janda. 2015. "Do "particles" deserve to be classified as a part of speech? A view from Russian." presented at *The 5th Conference of the Scandinavian Association for Language and Cognition*. Trondheim, Norway.

Reynolds, Robert and Francis Tyers. 2015. "Automatic word stress annotation of Russian unrestricted text." presented at the *Nordic Conference of Computational Linguistics NODALIDA 2015*. Vilnius, Lithuania.

Tyers, Francis and Robert Reynolds. 2015. "A preliminary constraint grammar for Russian." presented at the *Workshop on "Constraint Grammar – methods, tools, applications" at NODALIDA 2015*. Vilnius, Lithuania.

Reynolds, Robert, Eduard Schaf and Detmar Meurers. 2014. "A VIEW of Russian: Visual Input Enhancement for a Morphologically Rich Language." presented at the *3rd workshop on NLP for computer-assisted language learning*. Uppsala, Sweden, November 13.

Reynolds, Robert. 2014. "Automatic evaluation of potential targets for textual enhancement: identifying optimal sentences for learner uptake." presented at *Antwerp CALL 2014, the XVIth International CALL Research Conference*, July 7-9, Antwerp, Belgium.

Reynolds, Robert. 2014. "Automatisk vurdering og rangering av setninger i tekstberikelse." presented at *NORKOG: Kognitivt sommerseminar* June 20-21, Tromsø, Norway.

Reynolds, Robert. 2013. "Intelligent computer-assisted language learning applications for Russian." *Novemberseminaret*, Nov 22, Tromsø, Norway.

Reynolds, Robert. 2013. "Russian prefix ordering." *Giellatekno Seminar*, Sept 22, Tromsø, Norway.

Phelan, Michael, Jeffrey Parker, Robert Reynolds, Lauren Ressue. 2012. "Breaking command-ments and friend-ships: effects of relative frequency and affix parsability in lexical processing." presented at the *American International Morphology Meeting*, Sept 22, Amherst, MA.

Reynolds, Robert. 2012. "Are Russian prefixes out of order?: Complexity-Based Ordering and template morphology." presented at *Penn Linguistics Colloquium 36*, March 23-25, Philadelphia, PA.

Ressue, Lauren, Robert Reynolds, Jeffrey Parker, and Michael Phelan. 2010. "The complexity of processing simple words: The morphological processing of infrequent base words." presented at *The 5th Annual Slavic Linguistic Society Conference*, October 29, Chicago, IL.

Reynolds, Robert. 2010. "Diachronic trends in verb token frequencies in Old Novgorodian: Insights into the development of aspect." presented at *Midwest Slavic Conference*, April 17, Columbus, OH.

Posters:

Reynolds, Robert, and Detmar Meurers. 2014. "A VIEW of Russian: Visual Input Enhancement for a Morphologically Rich Language." presented at *The 3rd workshop on NLP for computer-assisted language learning*, Uppsala, Sweden, November 13.

Phelan, Michael, Jeffrey Parker, Robert Reynolds, Lauren Ressue. 2012. "Breaking command-ments and friend-ships: effects of relative frequency and affix parsability in lexical processing." presented at *The Buckeye Language Network Symposium*, Nov 30, Columbus, OH.

Reynolds, Robert. 2006. "The effects of irritating stimuli on mood-congruent memory." Poster presented at *The Mary Lou Fulton Mentored Research Conference*, Provo, UT.

Computer Applications:

Two-level finite-state morphology of Russian
 https://victorio.uit.no/langtech/trunk/langs/rus/ (source code)
 http://giellatekno.uit.no/cgi/d-rus.eng.html (online interface for raw analyses)
Constraint grammar of Russian
 https://svn.code.sf.net/p/apertium/svn/languages/apertium-rus/apertium-rus.rus.rlx
Russian VIEW
 http://gtlab.uit.no:8080/VIEW/
OpenSearch plugin for StarLing.rinet.ru's Russian morphological analysis.
 http://mycroftproject.com/search-engines.html?name=StarLing

Works in progress:

"With a VIEW to learn": assessing the effect of Russian VIEW on learner motivation and learning outcomes.

"Inspecting expected aspects": evaluating how textual features—such as nearby adverbs, verbs, or conjunctions—influence native Russian speakers' tendency to prefer imperfective or perfective aspect. In addition to theoretical contributions, this research is intended to improve the programming logic used to generate Russian VIEW aspect activities, as well as improving pedagogical approaches to aspect.

Russian L2 readability models: recent research shows that machine learning approaches to readability classification outperform traditional readability formulas. I am experimenting with a variety of features, comparing learning curves at different levels of complexity, and testing the generalizability/portability of resulting classifier models.

Russian inflection class inducer: an algorithm to induce a Zaliznjak-style morphological description from a set of attested wordforms. Facilitates the automatic expansion of my morphological analyzer's lexicon based on curated resources, such as wiktionary and opencorpora.

Two-level txt2ipa: a two-level transducer for converting orthographic text (with indicated stress position) into phonetic representations (either Russian Linguistic Alphabet or IPA)

Russian Grammar Reference Cards, 10 cards covering morphology, phonology, syntax, case governance of prepositions, inflectional irregularities and special topics. https://dl.dropboxusercontent.com/u/454734/ReynoldsGrammarCards_15Jul2013BW.pdf

Teaching Experience:

Visiting Affiliate, Russian 323 (morph. and phon.), Brigham Young University, 2016

Doctoral Fellow, 1st and 2nd year Russian, University of Tromsø, 2013-2017

Graduate Teaching Associate, 1st-3rd year Russian and Russian Individualized Instruction; Ohio State University, 2010-2013
- Primary instructor for these courses, responsible for all aspects of instruction, including lesson planning, classroom instruction, exam preparation, grading, etc.

Instructor of Russian, Intensive 12-week introductory Russian course, Missionary Training Center, Provo UT, 2002-2007

Teaching Assistant, First-year Russian, Dixon Middle School, 1994-1995

Other relevant professional work experience:

Team leader, Russian "Oahpa!" online grammar workbook, UiT The Arctic University of Norway, Tromsø 2013-2017

Team leader, Russian language textbook, Missionary Training Center, Provo UT, 2013

Training Coordinator, Russian and Ukrainian area, Missionary Training Center, Provo UT, 2007-2009 (hired/trained/supervised 36 Russian and Ukrainian teachers)

Pedagogical and Linguistic Consultant for Russian, TALL (Technology Assisted Language Learning) ver. 4.1, Missionary Training Center, 2008

Editor/Reviewer, SILA grammar manual, Missionary Training Center 2007-2009

Teaching Interests:

Linguistic tools for text processing
Web development
Computational linguistics
Corpus linguistics

Service:

Office Representative, Employee Giving Campaign, BYU, 2017
Reviewer, Journal of Slavic Linguistics, 2017
Reviewer, Building Educational Applications Workshop, 2016, 2017
Google Summer of Code, Mentor, 2014, 2015, 2016, 2017
Google Code-In, Mentor, 2014, 2015
Forskningsdagene science fair, Tromsø, Norway, Sept 19-20 2014

Buckeye Language Network, Steering Committee, 2010-2013
Graduate Council on Benefits and Compensation, 2011-2013
Ohio State University Slavic Department Technology Committee, 2011-2012
OSU Council of Graduate Students, 2011-2012
Ohio State University Slavic Department Web Committee, 2009-2010

Honors:
PhD Fellow, University of Tromsø, 2013 - present
FLAS Fellow, Ohio State University, 2011-2012
University Fellow, Ohio State University, 2009-2010
Debate Champion, Saratov State University Debate Competition, 2007
Member, Eta Sigma Phi, Classics Honor Society
Member, Dobro Slovo, National Slavic Honor Society

Foreign residence :
Norway, Tromsø, 2013 - 2015
Russia, Kazan' / Samara / Togliatti / Marks, 2000-2002

Languages Spoken:
English (native)
Russian
    ACTFL Oral Proficiency Interview, *Superior*, 2007
    ACTFL Writing Proficiency Test, *Superior*, 2007 (diagnostic score)
Norwegian
Bosnian/Croatian/Serbian
Czech
Latin

Computer Languages:
python
unix / bash scripting
lexc / twolc / vislcg3
LaTeX
sql
xml / xhtml / html
javascript / jquery
R