Kristina Gulordava

Department of Translation and Language Sciences
University Pompeu Fabra
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Postdoc Researcher, University Pompeu Fabra, Barcelona, Spain   Feb 2018 – present
ERC project: *A distributional Model of Reference to Entities* (PI: Gemma Boleda)
Research topics: multi-modal neural network models of language acquisition; fast mapping and unsupervised learning; computational syntax

Education

PhD in Linguistics, University of Geneva, Switzerland   June 2018
Thesis: *Word order variation and dependency length minimisation: A computational cross-linguistic approach* (supervisor: Paola Merlo)

MSc in Informatics, University of Lugano, Switzerland   July 2010
Concentration in Intelligent Systems   *Magna cum laude 8.94/10*
Thesis: *Empirical evaluation of credal classifiers* (supervisor: Marco Zaffalon)

BSc in Applied Mathematics and Informatics   Sept 2008
State Polytechnical University of St. Petersburg, Russia   *4.7/5*

Experience

Research

Research intern   Sept 2017 – Dec 2017
Facebook AI Research, Paris, France (advisor: Marco Baroni)

Visiting student   Sept 2016 – Feb 2017
ILCC, University of Edinburgh, UK (advisor: Frank Keller)

Visiting student   Sept 2014 – Jan 2015
INRIA Alpage, University Paris Diderot 7, France (advisor: Benoit Crabbé)

Research assistant   Oct 2012 – Sept 2013
University of Geneva, Department of Linguistics, Geneva, Switzerland
SNSF project: The Grammatical Basis of Language Frequencies (PI: Paola Merlo)

Research intern   June 2011 – Sept 2011
Institute of Cognitive Sciences and Technology of CNR, Laboratory for Applied Ontology, Trento, Italy
Project: Using discourse relations to enrich FrameNet (advisor: Laure Vieu)

Research intern   July 2010 – Sept 2010
Fondazione Bruno Kessler, Human Language Technologies Group, Trento, Italy
Project: Improving word sense disambiguation for Italian (advisor: Claudio Giuliani)

Teaching

Teaching assistant   Sept 2015 – Aug 2016
Programming and Algorithms (BA program), Department of Linguistics, University of Geneva

Teaching assistant Feb 2013 – Aug 2015
Empirical methods in language processing (MSc program), Department of Informatics, University of Geneva

Teaching assistant Feb 2009 – June 2009
Calculus I (BSc program), Faculty of Informatics, University of Lugano

SOFTWARE DEVELOPMENT

Java developer Feb 2008 – Sept 2008
SwiftTeams, St.Petersburg, Russia

Java developer intern June 2007 – Aug 2007
OpenWay Group Company, Russian IT department, St.Petersburg, Russia

PUBLICATIONS

JOURNALS & PROCEEDINGS

How to represent a word and predict it, too: Improving tied architectures for language modelling. Accepted at EMNLP 2018 (short)
Kristina Gulordava, Laura Aina, Gemma Boleda

Computational Quantitative Syntax: The Case of Universal 18. Accepted for LSRL 47 upcoming volume
Kristina Gulordava, Paola Merlo

Colorless Green Recurrent Networks Dream Hierarchically. NAACL 2018 pdf
Kristina Gulordava, Piotr Bojanowski, Edouard Grave, Tal Linzen, Marco Baroni

Multi-lingual Dependency Parsing Evaluation: a Large-scale Analysis of Word Order Properties using Artificial Data. TACL 2016 pdf
Kristina Gulordava, Paola Merlo

Discontinuous Verb Phrases in Parsing and Machine Translation of English and German. LREC 2016 pdf
Sharid Loáiciga, Kristina Gulordava

Dependency length minimisation effects in short spans: a large-scale analysis of adjective placement in complex noun phrases. ACL 2015 (short) pdf
Kristina Gulordava, Paola Merlo, Benoit Crabbé

Structural and lexical factors in adjective placement in complex noun phrases across Romance languages. CONLL 2015 pdf
Kristina Gulordava, Paola Merlo

Diachronic Trends in Word Order Freedom and Dependency Length in Dependency-Annotated Corpora of Latin and Ancient Greek. International Conference on Dependency Linguistics 2015 pdf
Kristina Gulordava, Paola Merlo

A distributional similarity approach to the detection of semantic change in the Google Books Ngram corpus. Proceedings of the GEMS 2011 Workshop pdf
Kristina Gulordava, Marco Baroni

PEER-REVIEWED ABSTRACTS

Do RNN language models induce referential information? An analysis of article prediction. Learning Language in Humans and Machines 2018
Kristina Gulordava, Gemma Boleda

Incremental Generative Model of Sentence Linearization and Word Order Variation. CMCL Workshop at EACL 2017
Kristina Gulordava, Frank Keller

Lexico-semantic factors in the variation of adjective placement in complex noun phrases in Italian. DSALT Workshop 2016
Kristina Gulordava

A large-scale corpus-based study of NP-internal word order variation for several languages. 8th Days of Swiss Linguistics 2014
Kristina Gulordava, Paola Merlo

Talks & Presentations

URLing research seminar, University Pompeu Fabra   May 2017
Computational models of word order variation and dependency length minimisation effects

ProbModels group seminar, University of Edinburgh   Jan 2017
Incremental Generative Model of Sentence Linearization and Word Order Variation

ProbModels group seminar, University of Edinburgh   Oct 2016
Quantifying and analysing word order variability and dependency length for multi-lingual parsing evaluation

LangLunch, University of Edinburgh   Oct 2016
Variation of adjective placement in complex noun phrases in Italian

Linguistic Department seminar, University of Geneva   Nov 2015
Quantitative analysis of Dependency Length Minimisation effects based on multilingual treebanks

Research seminar UFR de Linguistique, University Paris Diderot 7   Jan 2015
Quantitative patterns of NP-internal word order variation: a cross-linguistic corpus-based approach

FBK research center (Human Language Technologies group), Trento, Italy   Sept 2010
Credal classifiers and their empirical evaluation

Grants and awards

Swiss National Science Foundation Doc.Mobility grant   2016

Labex EFL (Paris, France) Mobility grant   2014

Swiss National Science Foundation grant to participate in the LSA Summer Institute   2013

Department of Linguistics scholarship for outstanding students, University of Geneva 2011, 2012

'Universita a colori' fellowship for international graduate students, University of Trento   2010

Fellowship for outstanding Master students, University of Lugano   2008

2nd diploma, City Olympiad in Physics, St-Petersburg   2002

3rd diploma, City Olympiad in Mathematics, St-Petersburg   2001

Technical skills

Programming languages:

- Python, R (current); Java, C (previous experience)

Data analysis and Machine Learning including:

- Neural Networks (PyTorch), Mixed-Effect statistical models (R)

Natural Language Processing techniques, tools and resources:

- Dependency treebanks (Universal Dependencies) and dependency parsing
- Stanford CoreNLP, Moses

Languages

Russian (native), English, Italian, French (fluent), Spanish (passive)

Additional experience

CUSO Schools in Statistics, Les Diablerets, Switzerland	Feb 2015, Sept 2015
Instructional Skills Workshop, University of Geneva, Switzerland	Sept 2014
CRUS Winter Schools in Language and Cognition, Macolin, Switzerland	Dec 2013, Dec 2015
LSA Summer Institute, University of Michigan, Ann Arbor (MI), USA	June 2013 – July 2013
Postgraduate Certificate in Linguistics, University of Geneva, Switzerland	Sept 2011 – Oct 2012
Master in Human Language Technologies, University of Trento, Italy	Sept 2010 – July 2011
PDMI Computer Science Club, Mathematical Institute of Russian Academy of Science, St. Petersburg, Russia	Sept 2007 – July 2008