Maria Nădejde

Curriculum Vitae

RESEARCH INTERESTS

Neural machine translation, statistical machine translation, natural language processing, machine learning.

EDUCATION

summer 2014, spring 2016 Visiting Student, Johns Hopkins University, CLSP.

September 2012 -

PhD in Informatics, University of Edinburgh, Institute of Language Cognition and Computation.

October 2009 – October 2011

European Master in Language and Communication Technologies, Free University of Bolzano, Italy and Saarland University, Saarbrücken, Germany.

Thesis (cum laude): Syntactic Word Reordering for Statistical Machine Translation

20 –25 July 2011

Lisbon Machine Learning School: Learning for the Web, Instituto Superior Tecnico, Instituto de Telecomunicações, Spoken Language Systems Lab - L2F of INESC-ID.

September 2004 – July 2009 **Diploma Engineer in Computer Science**, University "Politehnica" of Bucharest, Faculty of Automatic Control and Computer Science.

Thesis: Earthquake Simulation in Vrancea Seismic Region

Work Experience

July – December 2017

Researcher working on machine translation at the University of Edinburgh, ILCC.

Summer 2015

SWE Intern, PhD at Google working on Statistical Machine Translation.

2013,2014

Teaching Assistant and Marker, Foundation of Natural Language Processing, University of Edinburgh.

December 2010 – October 2011 **Research assistant**, Language Technology group at the German Research Center for Artificial Intelligence (DFKI).

Activities: Master's Thesis. Focused on statistical machine translation for the German-English language pair. Part of the EuroMatrixPlus research group. Machine translation evaluations.

 $\begin{array}{c} \text{July } 2010 - 15 \\ \text{September } 2010 \end{array}$

Research intern, "Human Language Technologies" group at Fondazione Bruno Kessler (FBK).

Activities: Studied the usage of class based language models for improving decoding efficiency in phrase-based SMT.

Supervisors: Prof. Dr. Marcello Federico, Dr. Nicola Bertoldi, Dr. Gabriele Musillo **OEM Setup Programmer**, BitDefender.

2008 - 2009

Activities: Developed tools in C++ for Windows (codeproject.com article - http://tinyurl.com/pn28oz5). Managed install kits.

OTHER ACTIVITIES

2017 **Program Committee** member for EACL, EAMT, TALLIP, EMNLP, WMT and for SRW at ACL 2017.

2015, 2016 **Program Committee** member for the Workshop on Machine Translation (WMT15), EMNLP 2015 short-papers and First Conference on Machine Translation (WMT16).

- 2015 Co-chair of ESSLLI 2015 Student Session for the Language and Computation track. (http://esslli-stus-2015.phil.hhu.de/)
- February 2014 Attended the Dagstuhl Seminar Statistical Techniques for Translating to Morphologically Rich Languages. (http://www.dagstuhl.de/14061)
 - 2012-2015 Contributed to the Moses open-source toolkit for Machine Translations.

 Participated at the Moses Machine Translation Marathon where I've also led one of the projects. (http://statmt.org/mtm14)

Technical Skills and Competences

Moses open source SMT toolkit

Natural language processing toolkits

Data structures and algorithms

Distributed programming

C++

Python

Unix shell script

Text-processing scripting languages - sed, awk

Publications

"Predicting Target Language CCG Supertags Improves Neural Machine Translation", (Maria Nadejde, Siva Reddy, Rico Sennrich, Tomasz Dwojak, Marcin Junczys-Dowmunt, Philipp Koehn, Alexandra Birch), Second Conference on Machine Translation (WMT), Copenhagen, September, 2017

"Syntax-aware Neural Machine Translation using CCG", (Maria Nadejde, Siva Reddy, Rico Sennrich, Tomasz Dwojak, Marcin Junczys-Dowmunt, Philipp Koehn, Alexandra Birch), https://arxiv.org/abs/1702.01147, 2017

"A Neural Verb Lexicon Model with Source-side Syntactic Context for String-to-Tree Machine Translation", (Maria Nadejde, Alexandra Birch, and Philipp Koehn), Proceedings of the International Workshop on Spoken Language Translation (IWSLT), Seattle, December, 2016

"Modeling Selectional Preferences of Verbs and Nouns in String-to-Tree Machine Translation", (Maria Nadejde, Alexandra Birch, and Philipp Koehn), Proceedings of the First Conference on Machine Translation, Berlin, August, 2016

"Edinburgh's Syntax-Based Machine Translation Systems", (Maria Nadejde, Philip Williams, and Philipp Koehn), Proceedings of the Eighth Workshop on Statistical Machine Translation, pages 170–176, Sofia, Bulgaria, August, 2013

AWARDS AND GRANTS

- 2012 2016 PhD grant from University of Edinburgh
 - 2011 LCT travel grant to attend the Workshop on Machine Translation and Morphologically-rich Languages.
 - 2010 LCT travel grant to attend the International Conference on Language Resources and Evaluation (LREC).

CERTIFICATES

2009 TOEFL IBT 114/120.

2001, 2008 German A2 language certificate, Schiller Institute Bucharest.

Languages

Romanian Native

English Full professional proficiency

German Elementary proficiency