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> May 11-13, 2011 Riga, Latvia

Editors Bolette Sandford Pedersen, Gunta Nešpore and Inguna Skadiņa

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Preface

The computational linguistics and language technology communities in the Nordic and Baltic countries have always considered the NODALIDA conference as one of the important events for meeting and interchanging new research in the field. Through the establishment of the Northern European Association of Language Technology (NEALT) in 2006, the NODALIDA conference has increased its importance and is now recognized outside the Nordic regions, as can be seen by the fact that we have received several European submissions from outside the Nordic and Baltic countries, as well as submissions from outside Europe such as the US, India, and Pakistan. We are very pleased to hereby present the Proceedings of NODALIDA 2011, the 18th Nordic Conference of Computational Linguistics, held 11-13 May 2011 in Riga, Latvia. We hope that these proceedings will serve as a useful and comprehensive repository of information, will facilitate research in language technology and will encourage the development of further language resources for the Nordic and Baltic languages!

According to the reviews provided by the review committee, a vast majority of the papers submitted for the conference this year were of very good quality. This is a positive sign of the fact that language technology in the Nordic and Baltic countries is striving. However, maintaining the tradition of the NODALIDA conference running over two days plus a workshop day, time scarcity has enforced us to accept only a limited number of papers. This means that even with an acceptance rate above 60%, several quality papers have been rejected. To sum up in figures, we received altogether 85 submissions from 20 countries in the four categories of full papers, short /demo papers, student papers, and workshops. Each submission received three reviews and borderline cases were further subjected to discussion among the Program Committee members. For the conference, we have accepted 52 papers which appear in these proceedings, as well as three workshops which will produce their own proceedings. Of the accepted papers in the main conference, 33 are long papers presented as talk or poster, 14 are short papers presented as poster or demo and five are student papers of which three are presented as talk and two as poster. It should be pointed out that most of the submissions are from the Nordic countries and only a limited number of papers are from the Baltic region. This may be because the Baltic HLT conference was held only recently. The papers selected for the conference represent a wide range of topics of research. corpus linguistics, lexicography, morphological and syntactic processing, machine including translation, speech technologies, semantics, and other areas of language technology.

We also have the pleasure of presenting three invited speakers at NODALIDA 2011, one of which is invited to present ongoing research in the host country, Latvia, and two others to present ongoing research in Sweden and Scotland, respectively. The invited talks concern central aspects of language technology such as discourse analysis, dependency parsing, and controlled natural languages. Bonnie Webber from University of Edinburgh talks about discourse structures and language technology and discusses how discourse structures can help to improve language technologies, and further, how language technologies can help to induce and model discourse structures. Joakim Nivre from Uppsala University gives a survey of recent advances in so-called bare-bones dependency parsing; focusing in particular on transition-based methods for highly efficient parsing. Guntis Bārzdiņš from University of Latvia talks about a new kind of rich controlled natural language which allows to narrow the gap with true natural language.

In addition, the conference program includes three workshops; two on the specialized topics terminology and Constraint Grammar, and one with the broader focus on visibility of language resources.

Moreover, the conference has attracted a satellite event, held before the workshops: The projectrelated meeting in META-NET/META-NORD which is the Nordic and Baltic branch of a Network of Excellence dedicated to building the technological foundations of a multilingual European information society. Finally, during the conference there will be the third NEALT business meeting.

The organization of a conference of this size is a joint effort between several organizational units. We would first like to thank our reviewers for their conscientious work in reviewing all the submitted contributions. We also wish to thank the Program Committee for inviting the reviewers as well as for the fruitful discussions regarding how to ensure a conference of high quality. A big thank you goes to the Local Organization Committee at the Institute of Mathematics and Computer Science of University of Latvia for their work concerning practical issues for the conference. Special thanks go to Mare Koit, Editor-in-Chief of the NEALT Publication Series at University of Tartu, for producing the electronic proceedings.

We wish you an inspiring conference!

Bolette Sandford Pedersen Program Chair NODALIDA 2011

Inguna Skadiņa Local Chair NODALIDA 2011

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Conference program

NODALIDA-2011

11 May

Satellite events

Workshops

- Workshop on Creation, Harmonization and Application of Terminology Resources
- Workshop in Constraint Grammar Applications
- Workshop on Visibility and Availability of LT resources

19.00 Welcome reception

12 May

9.00–9.30	Opening
	Mārcis Auziņš (Rector of the University of Latvia) Janne Bondi Johannessen (President of NEALT) Inguna Skadiņa (Chair of the Local Organizing Committee) Bolette Sandford Pedersen (Chair of the Program Committee)
9.30–10.30	Invited Talk (Chair: Costanza Navarretta)
	Prof. Bonnie Webber (University of Edinburgh). <i>Discourse Structures and Language Technologies</i>
10.30–11.00	Coffee

11.00–13.00 **3 parallel sessions: REGULAR papers**

annotation and use (Chair: Eiríkur Rögnvaldsson)
Costanza Navarretta, Elisabeth Ahlsén, Jens Allwood, Kristiina Jokinen and Patrizia Paggio. Creating Comparable Multimodal Corpora for Nordic Languages
Rico Sennrich and Martin Volk. Iterative, MT-based Sentence Alignment of Parallel Texts
Estelle Delpech. Evaluation of Terminologies Acquired from Comparable Corpora: an Application Perspective
Janne Bondi Johannessen and Emiliano Raúl Guevara. What Kind of Corpus is a Web Corpus?
ge classification (Chair: Hanne Fersøe)
Taraka Rama and Lars Borin. <i>Estimating Language Relationships from a Parallel</i> Corpus. A Study of the Europarl Corpus
Robert Remus. Improving Sentence-level Subjectivity Classification through Readability Measurement
Michael Wiegand and Dietrich Klakow. Convolution Kernels for Subjectivity Detection
POS tagging (Chair: Janne Bondi Johannessen)
Miikka Silfverberg and Krister Lindén. Combining Statistical Models for POS Tagging using Finite-State Calculus
Niels Beuck, Arne Köhn and Wolfgang Menzel. Decision Strategies for Incremental POS Tagging
Anssi Yli-Jyrä. Explorations on Positionwise Flag Diacritics in Finite-State Morphology
Heiki-Jaan Kaalep and Kadri Muischnek. Morphological Analysis of a Non-Standard Language Variety

13.00–14.00 Lunch

Wordnets and lex	xical issues	
	Kristiina Muhonen and Krister Lindén. Do Wordnets also Improve Human Performance on NLP Tasks?	
	Loïc Boizou. The Formal Patterns of the Lithuanian Verb Forms	
	Hector Martinez Alonso, Núria Bel and Bolette Sandford Pedersen. Identification of Sense Selection in Regular Polysemy using Shallow Features	
	Anders Johannsen and Bolette Sandford Pedersen. "Andre ord" — a Wordnet Browser for the Danish Wordnet, DanNet (DEMO)	
Syntax		
	Anne Bjerre. Extraction from Relative and Embedded Interrogative Clauses in Danish	
	Martin Hassel, Aron Henriksson and Sumithra Velupillai. Something Old, Something New — Applying a Pre-trained Parsing Model to Clinical Swedish	
	Atro Voutilainen and Tanja Purtonen. A Double-blind Experiment on Interannotator Agreement: the Case of Dependency Syntax and Finnish	
	Lauma Pretkalniņa, Gunta Nešpore, Kristīne Levāne-Petrova and Baiba Saulīte. A Prague Markup Language Profile for the SemTi-Kamols Grammar Model	
	Daiga Deksne and Raivis Skadiņš. CFG Based Grammar Checker for Latvian	
Morphology		
	Sami Virpioja, Oskar Kohonen and Krista Lagus. Evaluating the Effect of word Frequencies in a Probabilistic Generative Model of Morphology	
	Tommi Pirinen. Modularisation of Finnish Finite-State Language Description — Towards Wide Collaboration in Open Source Development of a Morphological Analyser	
Machine translation		
	Sara Stymne. Iterative Reordering and Word Alignment for Statistical MT	

15.30–15.45 Coffee

15.45–17.15 **3 parallel sessions: REGULAR papers**

Speech (Chair: N	Aeelis Mihkla)
15.45–16.15	Sofia Strömbergsson. Corrective Re-synthesis of Deviant Speech Using Unit Selection
16.15–16.45	Peter Juel Henrichsen. Fishing in a Speech Stream, Angling for a Lexicon
16.45–17.15	Bea Valkenier, Dirkjan Krijnders, Ronald van Elburg and Tjeerd Andringa. <i>Psycho-</i> Acoustically Motivated Formant Feature Extraction
Search and info	rmation extraction (Chair: Costanza Navarretta)
15.45-16.15	Lars Borin, Markus Forsberg and Christer Ahlberger. Semantic Search in Literature as an e-Humanities Research Tool: CONPLISIT — Consumption Patterns and Life-Style in 19th Century Swedish Literature
16.15–16.45	Silja Huttunen, Arto Vihavainen and Roman Yangarber. Relevance Prediction in Information Extraction Using Discourse and Lexical Features
16.45–17.15	Gintarė Grigonytė, Erika Rimkutė, Andrius Utka and Loïc Boizou. Experiments on Lithuanian Term Extraction
Syntax, indexing	g (Chair: Jussi Karlgren)
15.45–16.15	Peter Ljunglöf. Editing Syntax Trees on the Surface
16.15–16.45	Anders Søgaard. Using Graphical Models for PP Attachment
16.45–17.15	Erik Velldal. Random Indexing Re-Hashed
17.15–18.15	Invited Talk (Chair: Inguna Skadiņa)
	Prof. Guntis Bārzdiņš (University of Latvia). When FrameNet Meets a Controlled Natural Language

19.30 Conference dinner

13 May

9.00-10.00	Invited Talk (Chair: Kristiina Jokinen)
	Prof. Joakim Nivre (Uppsala University). <i>Bare-Bones Dependency Parsing</i> — A Case for Occam's Razor?

10.00–10.30 Coffee

10.30–12.00 **3 parallel sessions: REGULAR papers and STUDENT papers**

Lexicon, etymolo	gy (Chair: Bolette Sandford Pedersen)
10.30-11.00	Eckhard Bick. A FrameNet for Danish
11.00–11.30	Ingemar Hjälmstad, Martin Hassel and Maria Skeppstedt. The Impact of Part-of-Speech Filtering on Generation of a Swedish-Japanese Dictionary using English as Pivot Language
11.30-12.00	Hannes Wettig and Roman Yangarber. Probabilistic Models for Alignment of Etymological Data
Machine translat	tion; classification (Chair: Andrejs Vasiljevs)
10.30-11.00	Martin Volk and Rico Sennrich. <i>Disambiguation of English Contractions for Machine Translation of TV Subtitles</i>
11.00-11.30	Raivis Skadiņš, Tatiana Gornostay and Valters Šics. Toponym Disambiguation in English-Lithuanian SMT System with Spatial Knowledge
11.30–12.00	Eirini Florou and Stasinos Konstantopoulos. A Quantitative and Qualitative Analysis of Nordic Surnames
Student papers (Chair: Normunds Grūzītis)
10.30-11.00	Marius Olaussen. Evaluating the Speech Quality of the Norwegian Synthetic Voice Brage
11.00-11.30	Mojgan Seraji. A Statistical Part-of-Speech Tagger for Persian
11.30-12.00	Angel Genov and Georgi Iliev. Linguistic Motivation in Automatic Sentence Alignment of Parallel Corpora: the Case of Danish-Bulgarian and English-Bulgarian

12.00–13.00 Lunch

13.00–14.30 **12 Posters/demos** (Chair: Kristiina Jokinen)

13.00–14.30	12 Posters/demos (Chair: Kristiina Jokinen)
Classification &	summarization
	Christian Smith and Arne Jönsson. Automatic Summarization as Means of Simplifying Texts, an Evaluation for Swedish
	Per Almquist and Jussi Karlgren. Experiments to Investigate the Utility of Nearest Neighbor Metrics Based on Linguistically Informed Features for Detecting Textual Plagiarism
	Jody Foo. A Categorization Scheme for Analyzing Rules from a Handbook of Swedish Writing Rules
	Anju Saxena and Lars Borin. Dialect Classification in the Himalayas: a Computational Approach
Knowledge syste	ms
	Ann-Marie Eklund. Query Constraining Aspects of Knowledge
	Kenneth Wilhelmsson. Automatic Question Generation from Swedish Documents as a Tool for Information Extraction
Corpus creation,	, annotation and use
	Christian Hänig. Knowledge-free Verb Detection through Sentence Sequence Alignment
	Maria Holmqvist and Lars Ahrenberg. A Gold Standard for English-Swedish Word Alignment
	Anne-Kathrin Schumann. Corpus-based Terminology: Detection, Description and Representation of Knowledge-rich Contexts in Russian
Student posters	
	Anastasia Shimorina and Maria Grachkova. Identification of Context Markers for Russian Nouns
	Gideon Kotzé. Finding Statistically Motivated Features Influencing Subtree Alignment Performance
14.30–15.30	NEALT Business meeting
15 30-16 00	Closing

- 15.30–16.00 Closing
- 16.00-16.30 Coffee