## **Curriculum Vitae**

## **Els Lefever**

<u>els.lefever@ugent.be</u> <u>http://www.lt3.ugent.be/en/people/els-lefever/</u> Born: 4 Jan 1975, leper, Belgium

## **Academic degrees**

- 2012: Doctor of computer science "ParaSense: Parallel Corpora for Word Sense Disambiguation", Ghent University, faculty of sciences.
- 2007-2010: Postgraduate doctoral school in computer science at Ghent University, faculty of sciences.
- 1993-1997: Bachelor and Master degree in romance linguistics and literature (major French and Italian linguistics) at Ghent University, cum laude. Masters thesis: "La Polysémie des Adjectifs chromatiques"
- 1987-1993: Latin-Science-Mathematics at Sint-Aloysius college, Diksmuide.

## **Additional education**

- 2018: "effective selection of employees with STARR method" (Ghent University, ZAP training)
- 2018: "stress: take care of yourself and your employees" (Ghent University, ZAP training)
- 2018: "creating and editing video content with CAMTASIA" (Ghent University, ZAP training)
- 2017: "ZAP coaching of PhD students" (Ghent University, ZAP training)
- 2017: SDL "Trados Studio 2017" Certification
- 2016: "Leadership" course (Ghent University, postdoc training)
- 2015: "Technical writing" (DITA, oXygen) course (Scripto)
- 2015: "<u>Presentation skills</u>" (Ghent University, department of education office for educational quality control).
- 2015: "Creativity, pitching & resilience course" (Ghent University, postdoc training).
- 2014: "<u>The basics of University teaching</u>" (Ghent University, department of education office for educational quality control).
- 2012: online course on "Localisation" (Imperial College London).
- 2009-2010: "<u>Computational Intelligence</u>" (Ghent University, Department of Applied Mathematics & Computer Science).
- 2009: "<u>Introduction to language technology</u>" (Ghent University, colloaboration of the doctoral schools of "Arts, Humanities and Law" and "natural sciences").

- 2008: <u>TILP-CLP localisation</u> course certified localization professionals.
- 2007-2008: "<u>Programming I</u>" (Ghent University, Department of Applied Mathematics & Computer Science).
- 2007: Workshop on "<u>Machine Translation: finite-state models and statistical approaches</u>" (Enrique Vidal, Universidad Politécnica de Valencia, Spain, doctoral school "Computational Intelligence and Learning doctoral school", Louvain-la-neuve).
- 2006-2007: "<u>Scripting Languages</u>" (Ghent University, Department of Applied Mathematics & Computer Science).
- 1999: "Language and Computer Science" (Taal en Informatica, KATHO, Kortrijk), three modules:
  - $\circ \quad \text{Computational linguistics}$
  - $\circ \quad \text{Applied Statistics} \quad$
  - Introduction to structured programming

## **Full Career**

01/10/2016-now: Assistant Professor (docent) tenure track, Ghent University, Department of Translation, Interpreting and Communication, Language and Translation Technology Research Team (LT3)

- 1. Projects
  - EXTRACT: Extracting Terminology Automatically from Comparable Texts. The EXTRACT project aims to investigate a single, holistic methodology for automatic terminology extraction from comparable corpora (ATECC). In accordance with the most successful trends in natural language processing, special attention will be paid to machine learning and deep learning approaches. In preparation, several comparable corpora have been collected and annotated to provide data. Every aspect of ATECC will be researched, from data collection (what is the impact of the corpus?), to monolingual ATE (can a bottom-up approach based on human term annotations shed light on the ambiguous characteristics of terms?), to bilingual term linking (how can the most informative different strategies for bilingual alignment be combined?), to evaluation (how can an informative gold standard be constructed for ATECC?).
  - **PLATOS: Detection of topics, stance and argumentation in a social media corpus.** The PLATOS project aims at investigating stance and argument detection on automatically extracted topics in social media text by combining linguistic knowledge and machine learning. The proposed research is innovative in two respects: (1) term extraction and hypernym detection techniques will be combined with distributional information to detect topics and (2) a model for argumentation mining in social media text will be researched.
- 2. <u>Teaching</u>: Localisation, Digital Humanities, Introduction to translation technology (blended learning), Terminology and Translation Technology
- 3. (Co-)promotor of Ph.D thesises
  - Ayla Rigouts Terryn (2017-2021) prepares a Ph.D (FWO fellowship) on automatic terminology extraction from comparable corpora.

- Dirk van Nimwegen (2018-2022) prepares a Ph.D on semantic interoperability in medical communication between physicians and patients (interdisciplinary PhD with faculty of Medicine and Health Sciences).
- Nina Bauwelinck (2018-2022) prepares a Ph.D on topic, stance and argument detection in political social media posts.
- Gilles Jacobs (2017-2020) prepares a Ph.D on event extraction and sentiment analysis of financial news text.
- Jullie Mennes (2015-2019) finished a Ph.D (FWO fellowship) on the development of a context-sensitive support tool prototype for interdisciplinary research using comtemporary insights from computational linguistics and philosophy of science.

#### 4. Member of the Doctoral Advisory Committee (DBC)

- Pauline De Baets (2014-2017) prepares a Ph.D. on the structure of semantic networks in translated and non-translated Belgian Dutch by means of distributional techniques.
- Sofie Labat (2019-2022) prepares a Ph.D. on emotion detection and generation for a conversational agent.
- 5. <u>Member of PhD jury</u>
  - Lyan Verwimp (2019, KUL): Advanced language modeling techniques for speech processing
  - Arda Tezcan (2018, UGent): Informative Quality Estimation of Machine Translation output
  - Tom Vanallemeersch (2017, KUL): Data-driven Machine Translation using Semantic Tree Alignment
  - Sabien Hanoulle (2017, Ugent): Translating documentaries. Does the integration of a bilingual glossary of domain-specific terminology into the translation process reduce the translators' workload?
- 6. <u>Promotor of bachelor papers and master thesises</u> on sentiment analysis, prediction of wine and beer characteristics (color, flavor, aroma, country), terminology extraction (in cooperation with RIZIV), contributions to the MeSH termbase project, EuroLect: terminology in European and Belgian legislation

# 2013-2016: Postdoctoral Researcher, Ghent University, Department of Translation, Interpreting and Communication, Language and Translation Technology Research Team (LT3)

- 7. Projects
  - <u>MuST (Multilingual Corpora for the automatic Structuring of Terms) HOF postdoc grant.</u> The MuST project aims to extract all domain-specific terms from a multilingual technical corpus as well as the semantic relationships between these terms. The automatic detection of synonymy and hyponymy links allows taking an important step forward from a flat term list to a structured concept list. For the automatic terminology extraction and detection of semantic relations between the terms, I use a corpus-based approach without adding any external lexical resources. This turns it into a generic and language-independent approach, which allows deploying it dynamically to new domains or documents.

- <u>SCATE (Smart Computer-Aided Translation Environment) IWT-SBO research project.</u> The SCATE project focuses on developing innovative translation technology components and integrating them in a proof-of-concept system, a Smart Computer-Aided Translation Environment, which is a genuine support for the professional translator. My task in the project is to develop more sophisticated techniques for terminology extraction from comparable corpora.
- <u>AMiCA (Automatic Monitoring for Cyberspace Applications) IWT-SBO project.</u> The AMiCA project aims to mine relevant website resources (blogs, chat rooms and social networks), and collect, analyze, and integrate large amounts of subjective information using text and image analysis with the ultimate goal of tracing harmful content in an automatic way. My task in the project is to follow up the use case on cyber bullying.
- 8. Internationalisation: research stay (February-March 2014) at the Centre of Language Studies (headed by Prof. Dr. Antal van den Bosch) at Radboud University, (Nijmegen, The Netherlands). Research objectives:
  - Compilation of a corpus of Dutch and English wine reviews
  - Research on distributional and pattern-based methods to investigate the semantic fields of "smell" and "Taste" in the wine reviews
  - Automatic detection of colour, region, grape varieties and price by means of machine learning techniques (e.g. SVM, kNN) on the wine corpus
  - Automatic terminology extraction from wine reviews
- 9. <u>Teaching</u>: Localisation, Language Technology, Computer-assisted Translation, Methodological tools for Digital Humanities: Programming with Python, Introduction to translation technology (blended learning), Digital Humanities, Terminology and Translation Technology

#### 10. (Co-)promotor of Ph.D thesises

- Cynthia Van Hee (2013-2016) prepares a Ph.D in the framework of the IWT SBO AMiCA project on the monitoring of unwanted content on social media, with a special focus on automatic sarcasm detection in a cyber-bullying use case.
- Jullie Mennes (2015-2019) prepares a Ph.D (FWO fellowship) on the development of a context-sensitive support tool prototype for interdisciplinary research using comtemporary insights from computational linguistics and philosophy of science.
- Ayla Rigouts Terryn prepares a Ph.D proposal on automatic terminology extraction from comparable corpora.
- Gilles Jacobs prepares a Ph.D proposal on sentiment analysis of financial news text.

#### 11. Member of the Doctoral Advisory Committee (DBC)

- a. Lore Vandevoorde (2013-2016) prepares a Ph.D. on the structure of semantic networks in translated and non-translated Belgian Dutch. She performs a corpus-based investigation of prototype effects and the semantic range of polysemous and (near) synonymous lexemes.
- b. Pauline De Baets (2014-2017) prepares a Ph.D. on the structure of semantic networks in translated and non-translated Belgian Dutch by means of distributional techniques.

- 12. Member of the PhD examination commission of Orphée De Clercq: "Tipping the scales. Exploring the added value of deep semantic processing on readability prediction and sentiment analysis (2015).
- 13. Promotor of bachelor papers and master thesises on word sense disambiguation, automatic hypernym detection, readability of company documents (in cooperation with Infrabel).

# 2007-2012: Research Assistant, University College Ghent, Faculty of applied linguistics, Language and Translation Technology Research Team (LT3)

- HOF PhD grant: <u>"ParaSense: Parallel corpora for Dutch Word Sense Disambiguation</u>". My PhD research presents a truly multilingual machine learning approach to Word Sense Disambiguation (WSD), the NLP task that consists in selecting the correct sense of an ambiguous word in a given context. By recasting the task as a cross-lingual classification task that directly incorporates evidence from four other languages, it is a very flexible and language-independent approach that allows bypassing the knowledge acquisition bottleneck for WSD.
- <u>Research project for automatic terminology extraction</u> based on parallel corpora, in cooperation with Peugeot-Citroën S.A. and Telelingua: "Etude doublons et synonymes thesaurus APV -Optimisation thesaurus".
- 3. <u>Teaching</u>: Localisation, Computer-assisted Translation, SDL Trados for professional translators (cooperation with Telelingua, March 2009), computational intelligence (Ghent University, department of applied mathematics and computer science).
- 4. Promotor of various bachelor papers and master thesises on word sense disambiguation.

# 2001-2006: <u>Scansoft Belgium BVBA, taken over in 2005 by Nuance International</u>

Senior Linguist

Tasks:

- Training and management of junior colleagues
- Research projects for different text-to-speech modules (data driven modules for graphemeto-phoneme conversion and grammatical analysis components, pattern matching based text normalization modules, etc).
- Project Management: various development and customer projects for text-to-speech systems for different languages (French, Irish English, Canadian French, Cantonese Chinese).

#### 1997-2001: Lernout & Hauspie Speech Products

Computational linguist French and Italian

Tasks:

- Research projects for various languages
  - Promocor: Italian part of a prosody project (funded by the IWT, Flemish government agency for Innovation by Science and Technology).
  - Phonotop: French part of a grapheme-to-phoneme research project for toponyms (funded by the IWT)
- Development of various linguistic modules and speech databases for French, English and Italian text-to-speech systems.

# **Scientific output**

## 1. Publications

### A1 Publications

- 1. Mennes, J., Pedersen, T. & **Lefever, E.** (2019) Approaching terminological ambiguity in crossdisciplinary communication as a word sense induction task: a pilot study. LANGUAGE RESOURCES AND EVALUATION, 53 (4), 889-917.
- 2. Hoste, V., Vanopstal, K., Rigouts Terryn, A., & Lefever, E. (2019) The trade-off between quantity and quality: comparing a large web corpus and a small focused corpus for medical terminology extraction. ACROSS LANGUAGES AND CULTURES, 20 (2), 197-211.
- 3. Croijmans, I., Hendrickx, I., **Lefever, E.**, Majid, A. & van den Bosch, A. (2019) Uncovering the language of wine experts. NATURAL LANGUAGE ENGINEERING.
- 4. Van Hee, Cynthia, Jacobs, Gilles, Emmery, Chris, Desmet, B., Lefever, E., Verhoeven, B., De Pauw, G., Daelemans, W., & Hoste, V. (2018) Automatic Detection of Cyberbullying in Social Media Text. PLOS ONE, 13, 1-22.
- 5. Vandepitte, S. & Lefever, E. (2018) Translation as a multilingual activity in the digital era REVUE FRANCAISE DE LINGUISTIQUE APPLIQUEE. 23 (2), 59-72
- 6. Van Hee, C., **Lefever, E.**, & Hoste, V. (2018) We usually don't like going to the dentist. Using common sense to detect irony on Twitter. COMPUTATIONAL LINGUISTICS. In Press.
- 7. Van Hee, C., **Lefever, E**., & Hoste, V. (2018) Exploring the fine-grained analysis and automatic detection of irony on Twitter. LANGUAGE RESOURCES AND EVALUATION, 52 (3), 707-731.
- 8. Vandevoorde, L., **Lefever, E.,** Plevoets, Koen, & De Sutter, G. (2017) A corpus-based study of semantic differences in translation: the case of inchoativity in Dutch. TARGET-INTERNATIONAL JOURNAL OF TRANSLATION STUDIES, 29 (3), 388-415.
- 9. Goethals, P., Lefever, E., & Macken, L. (2017) SCAP\_TT: tagging and lemmatising Spanish tourism discourse, and beyond. IBERICA, 33, 273-282.
- 10. Lefever, E. (2016) A Hybrid Approach to Domain-independent Ontology Learning. APPLIED ONTOLOGY, 11 (3), 255-278.
- 11. Lefever, E., Van de Kauter, M., & Hoste, V. (2014). HypoTerm: detection of hypernym relations between domain-specific terms in Dutch and English. TERMINOLOGY, 20 (2), special issue: Lexical-semantic Approaches to Terminology, 250-278. John Benjamins Publishing Company. Impact Factor 2013: 0.375.
- Lefever, E., & Hoste, V. (2014). Parallel corpora make sense: Bypassing the knowledge acquisition bottleneck for Word Sense Disambiguation. INTERNATIONAL JOURNAL OF CORPUS LINGUISTICS, 19 (3), 333-367. John Benjamins Publishing Company. Impact Factor 2013: 0.564.

- Macken, L., Lefever, E. & Hoste, V. (2013). TExSIS: Bilingual Terminology Extraction from Parallel Corpora Using Chunk-based Alignment. TERMINOLOGY, 19 (1), 1-30. John Benjamins Publishing Company, Amsterdam, Netherlands. Impact Factor 2013: 0.375.
- Lefever, E., Fayruzov, T., Hoste, V. & De Cock, M. (2010). Clustering Web People Search Results using Fuzzy Ants. INFORMATION SCIENCES, 180 (17), 3192-3209. Elsevier Science Inc., New York, USA. Impact Factor 2010: 2.836.
- 15. Hoste, V., Vanopstal, K., **Lefever, E.** & Delaere, I. (2010). Classification-based scientific term detection in patient information. TERMINOLOGY, 16 (1), 1-29. John Benjamins Publishing Company, Amsterdam, Netherlands. Impact Factor 2010: 0.400.

#### **A2** Publications

- Rigouts Terryn, A., Hoste, V., Buysschaert, J., Vander Stichele, R., Van Campen, E. & Lefever, E. (2019) Validating multilingual hybrid automatic term extraction for search engine optimisation : the use case of EBM-GUIDELINES. ARGENTINIAN JOURNAL OF APPLIED LINGUISTICS, 7 (1), 93-108.
- Vandeghinste, V., Vanallemeersch, T., Augustinus, L., Bulté, B., Van Eynde, F., Joris Pelemans, Lyan Verwimp, Patrick Wambacq, Geert Heyman, Marie-Francine Moens, Iulianna van der Lek-Ciudin, Frieda Steurs, Ayla Rigouts Terryn, Els Lefever, Arda Tezcan, Lieve Macken, Veronique Hoste, Joke Daems, Joost Buysschaert, Sven Coppers, Jan Van den Bergh and Kris Luyten (2019) Improving the translation environment for professional translators. INFORMATICS-BASEL, 6 (2).
- 3. Van Hee, C., Van de Kauter, M., De Clercq, O., **Lefever, E**., & Hoste, V. (2017) Noise or music? Investigating the usefulness of normalisation for robust sentiment analysis on social media data. TRAITEMENT AUTOMATIQUE DES LANGUES, 58 (1), 63-87.
- 4. Van de Kauter, M., Coorman, G., **Lefever, E.,** Desmet, B., Macken, L., & Hoste, V. (2013). LeTs Preprocess: The multilingual LT3 linguistic preprocessing toolkit. Computational Linguistics in the Netherlands Journal, 3, 103-120.
- Lefever, E. & Hoste, V. (2011). Examining the Validity of Cross-Lingual Word Sense Disambiguation. Proceedings of the 12th International Conference on Intelligent Text Processing and Computational Linguistics (CICLing 2011), Polibits, 43, 29-35, Tokyo, Japan. (VABB)
- 6. Macken, L. & Lefever, E. (2008). Translational Equivalence in Statistical Machine Translation or Meaning as co-occurrence. In S. Vandepitte (ed.), Looking for meaning: Methodological issues in translation studies (7): Linguistica Antverpiensia, New Series, 193-208. University Press Antwerp, Antwerp, Belgium.

#### **B2** Publications

1. Van der Vliet, H. & **Lefever, E.** (2016). Hoe goed werkt termextractie voor het Nederlands? Terminologie in het Nederlandse taalgebied, 47-74. Academia Press.

 Vanopstal, K., Macken, L., Lefever, E., Van de Kauter, M., Buysschaert, J., & Hoste, V. (2014). Terminologie: op het snijvlak van ambacht en technologie. In S. Evenepoel, P. Goethals and L. Jooken (eds.), Beschouwingen uit een talenhuis, 179-189. Academia Press, Ghent, Belgium.

#### **B3** Publications

- 1. Folds, D., **Lefever, E.,** Gera, R. & Hoste, V. (2019). Proceedings of HUSO 2019, The fifth international conference on human and social analytics. IARIA, Rome, Italy.
- Lefever, E., Desmet, B., & De Pauw, G. (2018). Proceedings of TA-COS 2018 2nd Workshop on Text Analytics for Cybersecurity and Online Safety. European Language Resources Association (ELRA), Miyazaki (Japan).
- 3. Lefever, E. & Folds, D.J. (2016). Proceedings of HUSO 2016, The second international conference on human and social analytics. IARIA, Barcelona, Spain.
- 4. De Pauw, G., Verhoeven, B., Desmet, B., & **Lefever, E.** (2016). First workshop on text analytics for cybersecurity and online safety (TA-COS 2016). European Language Resources Association (ELRA), Portorož, Slovenia.
- 5. Lefever, E. & Hoste, V. (2011). Computational Linguistics in the Netherlands Journal, Ghent, Belgium.

#### **P1** Publications

- 1. Hendrickx, I., **Lefever, E.** & van den Bosch, A. (2016). Very quaffable and great fun: Applying NLP to wine reviews. Submitted to the 54th Annual Meeting of the Association for Computational Linguistics (ACL-2016), 306-312, Berlin, Germany.
- Lefever, E., Van de Kauter, M., & Hoste, V. (2014). Evaluation of Automatic Hypernym Extraction from Technical Corpora in English and Dutch. In Nicoletta Calzolari, Khalid Choukri, Thierry Declerck, Hrafn Loftsson, Bente Maegaard, Joseph Mariani, Asuncion Moreno, Jan Odijk and Stelios Piperidis (eds.), Proceedings of the Ninth International Conference on Language Resources and Evaluation (LREC'14), 490-497. European Language Resources Association (ELRA), Reykjavik, Iceland.
- 3. Lefever, E., Hoste, V. & De Cock, M. (2012). Discovering Missing Wikipedia Inter-language Links by means of Cross-lingual Word Sense Disambiguation. Proceedings of the eighth international conference on Language Resources and Evaluation (LREC 2012), 841-846, Istanbul, Turkey.
- Mourisse, D.M., Lefever, E., Verbiest, N.V., Saeys, Y.S., De Cock, M., & Cornelis, C. (2012). SBFC: An Efficient Feature Frequency-Based Approach to Tackle Cross-Lingual Word Sense Disambiguation. Proceedings of the 15th International Conference on Text, Speech and Dialogue (TSD 2012), LNCS 7499, 248-255, Springer-Verlag Berlin Heidelberg, Brno, Czech Republic.
- Hoste, V., Lefever, E., Vanopstal, K. & Delaere, I. (2008). Learning-based Detection of Scientific Terms in Patient Information. In N. Calzolari, K. Choukri, B. Maegaard, J. Mariani, J. Odjik, S. Piperidis, and D. Tapias (eds.), Proceedings of the Sixth Conference on International Language Resources and Evaluation (LREC'08). European Language Resources Association, 585-591, Marrakech, Morocco.

#### **C1** Publications

- 1. Bauwelinck, N. & Lefever, E. (2019) Measuring the impact of sentiment for hate speech detection on Twitter. Proceedings of HUSO 2019, The fifth international conference on human and social analytics. In HUSO, INTERNATIONAL CONFERENCE ON HUMAN AND SOCIAL ANALYTICS, 17-22.
- Antoine Vanrysselberghe & Lefever, E. (2019) Sentiment analysis of French political tweets: #MacronPrésident. Proceedings of HUSO 2019, The fifth international conference on human and social analytics. In HUSO, INTERNATIONAL CONFERENCE ON HUMAN AND SOCIAL ANALYTICS p.5-10
- 3. Labat, S. & Lefever, E. (2019) A classification-based approach to cognate detection combining orthographic and semantic similarity information. Proceedings of Recent Advances in Natural Language Processing (RANLP 2019): natural language processing in a deep learning world, 603-611.
- Bauwelinck, N., Jacobs, G., Hoste, V. & Lefever, E. (2019) LT3 at SemEval-2019 Task 5: multilingual detection of hate speech against immigrants and women in Twitter (hatEval). Proceedings of the 13th International Workshop on Semantic Evaluation (SemEval-2019), 436-440.
- Rigouts Terryn, A., Drouin, P., Hoste, V. & Lefever, E. (2019) Analysing the impact of supervised machine learning on automatic term extraction: HAMLET vs TermoStat. Proceedings of Recent Advances in Natural Language Processing (RANLP 2019): natural language processing in a deep learning world, 1013-1022.
- Rigouts Terryn, A., Macken, L., Lefever, E., Vander Stichele, R., Vanneste, K. & Buysschaert, J. (2019) Pilot Study on Medical Translations in Lay Language: Post-Editing by Language Specialists, Domain Specialists or Both? Proceedings of Translating and the computer 41 (TC41).
- Rigouts Terryn, A., Hoste, V., Buysschaert, J., & Lefever, E. (2018). Multilingual Hybrid Automatic Term Extraction: the use case of ebpracticenet. In T. Read, S. Montaner, & B. Sedano (Eds.), Technological Innovation for Specialized Linguistic Domains Languages for Digital Lives and Cultures, Proceedings of TISLID'18. Presented at the third conference on Technological Innovation for Specialized Linguistic Domains (TISLID 18), Editions universitaires europeennes.
- Jacobs, Gilles, Lefever, E., & Hoste, V. (2018). Economic event detection in company-specific news text. In U. Hahn, V. Hoste, & M.-F. Tsai (Eds.), Proceedings of the First Workshop on Economics and Natural Language Processing, 1–10, Melbourne, Australia: Association for Computational Linguistics.
- 9. Van Hee, C., Lefever, E., & Hoste, V. (2018). SemEval-2018 task 3: irony detection in English tweets. Proceedings of 12th International Workshop on Semantic Evaluation, 39–50. Presented at the SemEval-2018 workshop at the 16th Annual Conference of the North American Chapter of the Association for Computational Linguistics (NAACL HLT 2018), Association for Computational Linguistics.
- Faralli, S., Lefever, E., & Paolo Ponzetto, S. (2018). MIsA : multilingual "IsA" extraction from Corpora. In N. Calzolari, K. Choukri, C. Cieri, T. Declerck, S. Goggi, K. Hasida, H. Isahara, et al. (Eds.), Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018), 2040–2044, Miyazaki, Japan. ELRA.
- Lefever, E., Hendrickx, I., Croijmans, I., Van den Bosch, A., & Majid, A. (2018). Discovering the language of wine reviews: a text mining account. In N. Calzolari, K. Choukri, C. Cieri, T. Declerck, S. Goggi, K. Hasida, H. Isahara, et al. (Eds.), Proceedings of the Eleventh International Conference on Language Resources and Evaluation (LREC 2018), 3297–3302, Miyazaki, Japan. ELRA.
- Vandeghinste, V., Vanallemeersch, T., Bulté, B., Augustinus, L., Van Eynde, F., Pelemans, J., Verwimp, L., et al. (2018). Smart Computer-Aided Translation Environment (SCATE): Highlights. Presented at the 21st Annual Conference of the European Association for Machine Translation (EAMT 2018).

- Rigouts Terryn, A., Hoste, V., & Lefever, E. (2018). A gold standard for multilingual automatic term extraction from comparable corpora: term structure and translation equivalents. Proceedings of the 11th International Conference on Language Resources and Evaluation (LREC2018), 1803–1808, Miyazaki, Japan. ELRA.
- 14. Vandeghinste, V., Coppers, S., Van den Bergh, J., Bulté, B., Rigouts Terryn, A., **Lefever, E**., van der Lek, I., et al. (2018). The SCATE prototype: a smart computer-aided translation environment. Proceedings of the 39th Conference on Translating and the Computer, 104–113. Presented at the 39th Conference on Translating and the Computer, AsLing.
- 15. De Clercq, Orphée, **Lefever, E.,** Jacobs, G., Carpels, T., & Hoste, V. (2017). Towards an integrated pipeline for aspect-based sentiment analysis in various domains. Proceedings of the 8th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis, 136–142. Presented at the EMNLP2017, Association for Computational Linguistics.
- 16. Lefever, E., Allein, L., & Jacobs, G. (2017). In the eye of the beer-holder: lexical descriptors of aroma and taste sensations in beer reviews. HUSO 2017: The Third International Conference on Human and Social Analytics, 25–29. IARIA.
- Van Hee, C., Lefever, E., & Hoste, V. (2016). Monday mornings are my fave : #not exploring the automatic recognition of Irony in English tweets. In N. Calzolari, Y. Matsumoto, & R. Prasad (Eds.), Proceedings of COLING 2016, 26th International Conference on Computational Linguistics (pp. 2730–2739). ACL.
- Van Hee, C., Verleye, C., & Lefever, E. (2016). Analysing emotions in social media coverage on Paris terror attacks: a pilot study. In E. Lefever & D. J. Folds (Eds.), Proceedings of HUSO 2016, The Second International Conference on Human and Social Analytics, 33–37. Presented at the The Second International Conference on Human and Social Analytics (HUSO 2016), IARIA.
- 19. Lefever, E. & Hoste, V. (2016). A Classification-based Approach to Economic Event Detection in Dutch News Text. Proceedings of the Tenth International Conference on Language Resources and Evaluation (LREC'16). European Language Resources Association (ELRA), 330-335, Portorož, Slovenia.
- Van Hee, C., Lefever, E. & Hoste, V. (2016). Exploring the Realization of Irony in Twitter Data. Proceedings of the Tenth International Conference on Language Resources and Evaluation (LREC'16). European Language Resources Association (ELRA), 1795-1799, Portorož, Slovenia.
- Bordea, G., Lefever, E. & Buitelaar, P. (2016). Semeval-2016 task 13: Taxonomy Extraction Evaluation (TExEval-2). Proceedings of the 10th International Workshop on Semantic Evaluation (SemEval 2016). Association for Computational Linguistics (ACL), 1081-1091, San Diego, California.
- Rigouts Terryn, A., Macken, L. & Lefever, E. (2016). Dutch Hypernym Detection: Does Decompounding Help? Proceedings of the Joint Second Workshop on Language and Ontology & Terminology and Knowledge Structures (LangOnto2 + TermiKS), 74-78, , Portorož, Slovenia.
- 23. Hoste, V., **Lefever, E.,** van der Waart van Gulik, S. & Desmet, B. (2016). TripleSent: a Triple Store of Events Associated with their Prototypical Sentiment. Proceedings of the Eighth International Conference on Information, Process, and Knowledge Management, 91-93, Venice, Italy.
- 24. Vandevoorde, L., De Baets, P., **Lefever, E.,** Plevoets, K. & De Sutter, G. (2016). Distributional and translational solutions to the visualization of semantic differences between translated and non-translated Dutch. Proceedings of the 6th Conference on Quantitative Investigations in Theoretical Linguistics.
- **25. Lefever, E.** (2015). LT3: A Multi-modular Approach to Automatic Taxonomy Construction. Proceedings of the 9<sup>th</sup> International Workshop on Semantic Evaluation (SemEval 2015), 944-948. Association for Computational Linguistics (ACL), Denver, Colorado, USA.
- 26. Van Hee, C., Lefever, E., & Hoste, V. (2015). LT3: Sentiment Analysis of Figurative Tweets: a piece of cake. #NotReally. Proceedings of the 9<sup>th</sup> International Workshop on Semantic Evaluation (SemEval 2015), 684-688. Association for Computational Linguistics (ACL), Denver, Colorado, USA.

- 27. De Clercq, O., Van de Kauter, M., Lefever, E., & Hoste, V. (2015). Applying Hybrid Terminology Extraction to Aspect Based Sentiment Analysis. Proceedings of the 9<sup>th</sup> International Workshop on Semantic Evaluation (SemEval 2015), 719-724. Association for Computational Linguistics (ACL), Denver, Colorado, USA.
- Van Hee, C., Lefever, E., Verhoeven, B., Mennes, J., Desmet, B., De Pauw, G., Daelemans, W. & Hoste, V. (2015). Detection and Fine-Grained Classification of Cyberbullying Events. Proceedings of Recent Advances in Natural Language Processing (RANLP 2015), 672–680, Hissar, Bulgaria.
- 29. Van Hee, C., Lefever, E., Verhoeven, B., Mennes, J., Desmet, B., De Pauw, G., Daelemans, W. & Hoste, V. (2015). Automatic Detection and Prevention of Cyberbullying. The First International Conference on Human and Social Analytics (HUSO 2015), 13-18, St. Julians, Malta. [Best paper award]
- **30.** Van Hee, C., Van de Kauter, M., De Clercq, O., **Lefever, E.,** & Hoste, V. (2014). LT3: Sentiment Classification in User-Generated Content Using a Rich Feature Set. Proceedings of the 8th International Workshop on Semantic Evaluation (SemEval 2014), 406-410. Association for Computational Linguistics (ACL), Dublin, Ireland.
- 31. van Gompel, M., Hendrickx, I., van den Bosch, A., Lefever, E., & Hoste, V. (2014). SemEval 2014 Task 5 L2 Writing Assistant. Proceedings of the 8th International Workshop on Semantic Evaluation (SemEval 2014), 36-44. Association for Computational Linguistics (ACL), Dublin, Ireland.
- 32. Lefever, E., & Hoste, V. (2013). SemEval-2013 Task 10: Cross-Lingual Word Sense Disambiguation. Second Joint Conference on Lexical and Computational Semantics (\*SEM), Volume 2: Proceedings of the Seventh International Workshop on Semantic Evaluation (SemEval 2013). ACL, Atlanta, Georgia, USA.
- **33.** Schropp, G.Y.R., **Lefever, E.,** & Hoste, V. (2013). A combined pattern-based and distributional approach for automatic hypernym detection in Dutch. Proceedings of the 9th International Conference on Recent Advances in Natural Language Processing (RANLP 2013), 593-600, Hissar, Bulgaria.
- **34.** De Clercq, O., Schulz, S., Desmet, B., **Lefever, E.,** & Hoste, V. (2013). Normalization of Dutch User-Generated Content. Proceedings of the 9th International Conference on Recent Advances in Natural Language Processing (RANLP 2013), 179-188, Hissar, Bulgaria.
- **35.** Lefever, E., Hoste, V. & De Cock, M. (2013). Five languages are better than one: an attempt to bypass the language acquisition bottleneck for WSD. In Alexander Gelbukh (ed.), CICLing 2013, Part I, LNCS 7816, 343-354. Springer-Verlag Berlin Heidelberg, Samos, Greece. [Third best paper award]
- 36. Lefever, E., Hoste, V. & De Cock, M. (2011). ParaSense or how to use Parallel Corpora for Word Sense Disambiguation. Proceedings of the 49th Annual Meeting of the Association for Computational Linguistics: Human Language Technologies, 317-322, Portland, Oregon, USA.
- Lefever, E. & Hoste, V. (2011). An Evaluation and Possible Improvement Path for Current SMT Behavior on Ambiguous Nouns. Proceedings of SSST-5, Fifth Workshop on Syntax, Semantics and Structure in Statistical Translation (ACL HLT 2011), 52-60, Portland, Oregon, USA.
- Lefever, E., Hoste, V. & De Cock, M. (2011). Using Parallel Corpora for Word Sense Disambiguation. Proceedings of the 23rd Benelux Conference on Artificial Intelligence, 407-408, Gent, Belgium.
- Lefever, E. & Hoste, V. (2010). SemEval-2010 Task 3: Cross-lingual Word Sense Disambiguation. Proceedings of the ACL Workshop on Semantic Evaluations (SemEval- 2010), 15-20, Uppsala, Sweden.
- Lefever, E. & Hoste, V. (2010). Construction of a Benchmark Data Set for Cross-Lingual Word Sense Disambiguation. In N. Calzolari, K. Choukri, B. Maegaard, J. Mariani, J. Odijk, S. Piperidis, M. Rosner, & D. Tapias (eds.), Proceedings of the seventh International Conference on Language Resources and Evaluation (LREC'10). European Language Resources Association, 1584-1590, Valletta, Malta.

- 41. Lefever, E., Macken, L. & Hoste, V. (2009). Language-independent bilingual terminology extraction from a multilingual parallel corpus. Proceedings of the 12th Conference of the European Chapter of the Association for Computational Linguistics. The Association for Computational Linguistics, 496-504, Athens, Greece.
- 42. Lefever, E. & Hoste, V. (2009). SemEval-2010 Task 3: Cross-lingual Word Sense Disambiguation. Proceedings of the Workshop on Semantic Evaluations: Recent Achievements and Future Directions (SEW-2009), 82-87, Boulder, Colorado.
- 43. Lefever, E., Fayruzov, T., Hoste, V. & De Cock, M. (2009). Fuzzy Ants Clustering for Web People Search. Proceedings of WePS2 (2nd Web People Search Evaluation Workshop), workshop at WWW2009. Madrid, Spain.
- Macken, L., Lefever, E. & Hoste, V. (2008). Linguistically-based sub-sentential alignment for terminology extraction from a bilingual automotive corpus. Proceedings of the 22nd International Conference on Computational Linguistics (Coling 2008), 529-536, Manchester, UK.
- 45. Lefever, E., Fayruzov, T. & Hoste, V. (2007). AUG: A combined classification and clustering approach for web people disambiguation. Proceedings of the 4th International Workshop on Semantic Evaluations, 105-108, Prague, Czech Republic.
- Hoste, V., Vanopstal, K. & Lefever, E. (2007). The Automatic Detection of Scientific Terms in Patient Information. Proceedings of the Workshop on Acquisition and Management of Multilingual Lexicons, 41-48, Borovetz, Bulgaria.

#### **C3** Publications

- 1. De Clercq, Orphée, **Lefever, E**., Jacobs, G., Carpels, T., & Hoste, V. (2017). Hello ABSA! Collaboration between LT3 and Hello Customer to develop an aspect-based sentiment analysis pipeline. Presented at the ATILA17.
- 2. Jacobs, Gilles, Van Hee, C., Emmery, C., Desmet, B., **Lefever, E.,** Verhoeven, B., De Pauw, G., et al. (2017). Cyberbullying Detection in Social Media. Presented at the CLIN27.
- 3. Van der Lek-Ciudin, I., Rigouts Terryn, A., Heyman, G., **Lefever, E**., & Steurs, F. (2017). Translators' methods of acquiring domain-specific terminology. Information Retrieval in Terminology Using Lexical Knowledge Patterns. 21st Symposium on Language for Specific Purposes, LSP 2017. Presented at the Symposium on Language for Specific Purposes, LSP.
- 4. Vandevoorde, L., De Baets, P., **Lefever, E.,** Plevoets, K. & De Sutter, G. (2015). Distributional and translational solutions to the visualization of semantic differences between translated and non-translated Dutch. Proceedings of the 6th Quantitative Investigations in Theoretical Linguistics conference (QITL), Tübingen, Germany.
- 5. Vandevoorde, L., Plevoets, K., **Lefever, E.** & De Sutter, G. (2015). A cognitive-translational approach to meaning: visualizing semantic structure through translational corpora. Translation in Transition, Abstracts.
- De Baets, Pauline, Vandevoorde, L., Lefever, E., Plevoets, K., & De Sutter, G. (2015). Lexicosemantische verschillen tussen vertaald en niet-vertaald Nederlands: een distributionele corpusanalyse van "beginnen." Presented at the BKL Taaldag.
- Vandeghinste, V., Vanallemeersch, T., Van Eynde, F., Macken, L., Lefever, E., Hoste, V., Moens, M.-F., Pelemans, J., Wambacq, P., Haesen, M., Coninx, K. & De Wachter, K. (2014). SCATE. Smart Computer-Aided Translation Environment. Proceedings of the 17th Annual Conference of the European Association for Machine Translation. Dubrovnik, Croatia. Posters.

## 2. Organization of workshops/conferences/shared tasks

- 1. Organization of TermEval 2020 (Monolingual Automatic Term Extraction) shared task at the 6<sup>th</sup> International Workshop on Computational Terminology (Computerm 2020), collocated with LREC 2020 (Marseille, France), May 2020.
- 2. Organization of <u>five shared tasks in the framework of SemEval</u>, an on-going series of evaluations of computational semantic analysis systems:
  - a. Co-organizer of SemEval-2018 "Irony Detection in English Tweets" (New Orleans, USA), June 2018.
  - b. Co-organizer of SemEval-2016 "TExEval-2 Taxonomy Extraction" (San Diego, USA), June 2016.
  - c. Co-organizer of SemEval-2014 "L2 Writing Assistant" task (Dublin, Ireland), August 2014.
  - d. Organizer of SemEval-2013 "Cross-lingual Word Sense Disambiguation" (Atlanta, USA), June 2013.
  - e. Organizer of SemEval-2010 "Cross-lingual Word Sense Disambiguation" task (Uppsala, Sweden), June 2010.
- 3. Organization of the <u>TA-COS</u> (Text Analytics for Cybersecurity and Online Safety) workshop, 2016 (collocated with LREC 2016), 2018 (collocated with LREC 2018).
- 4. Organization of EMOSEDE (Emotion and Sentiment Detection) special session at HUSO-2016 (Barcelona, Spain, November 2016) and HUSO-2019 (Rome, Italy, June 2019).
- 5. Organization of the Atila 2014 Workshop (Ghent, Belgium), 20-21 November 2014.
- 6. Organization of the <u>symposium</u> "Exploiting parallel corpora for lexical disambiguation" (Ghent, Belgium), September 2012.
- 7. Organization of <u>CLIN 21</u> Computational Linguistics in the Netherlands conference (Ghent, Belgium), February 2011.

#### 3. Reviewing

#### 1. Expert reviewer for European funding agencies

- 1. <u>Monitor for the European Commission:</u> Monitor (previously known as "reviewer") for the EU's Seventh Framework Programme for Research (FP7). I performed the final review of the "TaaS, Terminology as a Service" project (June-July 2014, Luxemburg).
- 2. <u>Project reviewer Swiss National Science Foundation</u> (SNSF): "Predictive Health via Neural Networks and Ontologies" (2019)
- 2. Area Chair at conferences

Area Chair for the track of Sentiment Analysis and Argument mining at ACL 2019 (The 57th Annual Meeting of the Association for Computational Linguistics), Florence, Italy.

- 3. Member of Program Committees
  - 1. ACL 2020 (58<sup>th</sup> Annual Meeting of the Association for Computational Linguistics), July 2020, Seattle, Washington.

- 2. LREC 2020 (12th International Conference on Language Resources and Evaluation), May 2020, Marseille, France.
- 3. IJCAI-PRICAI 2020 (International Joint Conference on Artificial Intelligence Pacific RIM International Conference on Artificial Intelligence), July 2020, Yokohama, Japan.
- 4. EMNLP-IJCNLP 2019 (2019 Conference on Empirical Methods in Natural Language Processing and 9th International Joint Conference on Natural Language Processing), November 2019, Hong Kong, China.
- 5. NAACL-HLT 2019 (Conference of the North American Chapter of the Association for Computational Linguistics Human Language Technologies), June 2019, Minnesota, USA.
- 6. IJCAI-2019 (the 28th International Joint Conference on Artificial Intelligence), August 2019, Macao, China.
- 7. WASSA 2019 (10<sup>th</sup> Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis), June 2019, Minneapolis, Minnesota, USA.
- 8. ACL 2019 (the 57<sup>th</sup> Annual Meeting of the Association for Computational Linguistics), July 2019, Florence, Italy.
- 9. RANLP 2019 (Recent Advances in Natural Language Processing), September 2019, Varna, Bulgaria.
- 10. HUSO 2019 (International Conference on Human and Social Analytics), July 2019, Rome, Italy.
- 11. MomenT (Multilingualism at the intersection of Knowledge Bases and Machine Translation), August 2019, Dublin, Ireland.
- 12. WiNLP 2019 (Widening NLP workshop), July 2019, Florence, Italy.
- 13. FinNLP (First Workshop on Financial Technology and Natural Language Processing), August 2019, Macao, China.
- 14. SEM 2019 (8<sup>th</sup> Joint Conference on Lexical and Computational Semantics), June 2019, Minneapolis, Minnesota, USA.
- 15. LAW XIII (Thirteenth Linguistic Annotation Workshop), August 2019, Florence, Italy.
- 16. ALW 3 (The Third Workshop on Abusive Language Online), August 2019, Florence, Italy.
- 17. AAAI-19 (the 33rd AAAI Conference on Artificial Intelligence), January 2019, Honolulu, Hawaii, USA.
- 18. NLDB2019 (International Conference on Applications of Natural Language to Information Systems), June 2019, Manchester, UK
- 19. ACL 2018 (Annual Meeting of the Association for Computational Linguistics), July 2018, Melbourne, Australia. > acknowledged as top-reviewer by the ACL committee ("The ACL program committee wishes to acknowledge the excellent reviewing performance of the following reviewers. They were recognized by the area chairs as outstanding reviewers who have turned in exceptionally well-written and constructive reviews and who have actively engaged themselves in the post-rebuttal discussions.")
- 20. IJCAI-ECAI-18 (27th International Joint Conference on Artificial Intelligence (IJCAI) and the 23rd European Conference on Artificial Intelligence (ECAI)), July 2018, Stockholm, Sweden.
- 21. COLING 2018 (International Conference on Computational Linguistics), August 2018, Santa Fe, New Mexico, USA.

- 22. 6th Conference on CMC and Social Media Corpora, September 2018, Antwerpen, Belgium.
- 23. HUSO 2018 (International Conference on Human and Social Analytics), June 2018, Venice, Italy.
- 24. ALW2 (2nd Workshop on Abusive Language Online), October 2018, Brussels, Belgium.
- 25. LAW-MWE-CxG 2018 (Joint Workshop on Linguistic Annotation, Multiword Expressions and Constructions), August 2018, Santa Fe, New Mexico, USA.
- 26. SEMAPRO 2018 (The Twelfth International Conference on Advances in Semantic Processing), November 2018, Athens, Greece.
- 27. EMNLP 2018 (Conference on Empirical Methods in Natural Language Processing), October 2018, Brussels, Belgium.
- 28. MOMenT 2018 workshop (Multilingualism at the intersection of Knowledge Bases and Machine Translation), May 2018, Miyazaki, Japan.
- 29. NLDB 2018 (International Conference on Natural Language & Information Systems), June 2018, Paris, France.
- 30. TISLID18 (Technological Innovation for Specialized Linguistic Domains), May 2018, Ghent, Belgium.
- 31. LREC 2018 (Language Resources and Evaluation Conference), May 2018, Miyazaki, Japan.
- 32. IJCNLP 2017 (International Joint Conference on Natural Language Processing), December 2017, Taipei, Taiwan.
- 33. EMNLP 2017 (Conference on Empirical Methods in Natural Language Processing), September 2017, Copenhagen, Denmark.
- 34. RANLP 2017 (Recent Advances in Natural Language Processing), September 2017, Varna, Bulgaria.
- 35. EACL 2017 (European Chapter of the Association for Computational Linguistics), April 2017, Valencia, Spain.
- 36. ACL 2017 (Annual Meeting of the Association for Computational Linguistics), August 2017, Vancouver, Canada.
- 37. First Workshop on Abusive Language Online, August 2017, Vancouver, Canada.
- 38. HUSO 2017 (International Conference on Human and Social Analytics), July 2017, Nice, France.
- 39. \*SEM 2017 (sixth joint conference on lexical and computational semantics), August 2017, Vancouver, Canada.
- 40. NLDB 2017 (International Conference on Natural Language & Information Systems), June 2017, Liège, Belgium.
- 41. Translation [and Interpreting] in Transition Conference, July 2017, Ghent, Belgium.
- 42. LREC 2016 (10th edition of the Language Resources and Evaluation Conference), May 2016, Portorož, Slovenia.
- 43. COLING 2016 (26th International Conference on Computational Linguistics), December 2016, Osaka, Japan.
- 44. HUSO 2016 (Second International Conference on Human and Social Analytics), November 2016, Barcelona, Spain.

- 45. SemEval-2016 (International workshop on Semantic Evaluation), June 2016, San Diego, USA.
- 46. LREC 2016 (10th edition of the Language Resources and Evaluation Conference), May 2016, Portorož, Slovenia.
- 47. SemEval-2016 (International workshop on Semantic Evaluation), June 2016, San Diego, CA, USA.
- 48. NLDB 2016 (21st International conference on Applications of Natural Language to Information Systems), June 2016, Salford, UK.
- 49. LAW X 2016 (10th Linguistic Annotation Workshop), August 2016, Berlin, Germany.
- 50. CLIN 26 (Computational Linguistics in the Netherlands), December 2015, Amsterdam, the Netherlands.
- 51. ACL-IJCLNLP 2015 (53rd Annual Meeting of the Association for Computational Linguistics and the 7th International Joint Conference on Natural Language Processing), July 2015, Beijing, China.
- 52. SemEval-2015 (International workshop on Semantic Evaluation), June 2015, Denver, Colorado, USA.
- 53. LAW IX 2015 (9th Linguistic Annotation Workshop), June 2015, Denver, Colorado, USA.
- 54. NLDB 2015 (20th International Conference on Applications of Natural Language to Information Systems), June 2015, Passau, Germany.
- 55. WNACP-2015 (1st Workshop on NLP Applications: completing the puzzle), June 2015, Passau, Germany.
- 56. CLIN 24 (Computational Linguistics in the Netherlands), November 2014, Leiden, Netherlands.
- 57. SemEval-2014 (International workshop on Semantic Evaluation), August 2014, Dublin, Ireland.
- 58. CLIN 23 (Computational Linguistics in the Netherlands), January 2013, Twente, Netherlands.
- 59. SSST-7 (7th Workshop on Syntax, Semantics and Structure in Statistical Translation), June 2013, Atlanta, USA.
- 60. SemEval-2013 (International workshop on Semantic Evaluation), June 2013, Atlanta, Georgia, USA.
- 61. ISKE-2011 (2011 IEEE International Conference on Intelligent Systems and Knowledge Engineering), December 2011, Shanghai, China.
- 62. ESSLLI-2011 (European Summer School in Logic, Language and Information), August 2011, Ljubljana, Slovenia.
- 63. ACL-HLT 2011 (Association for Computational Linguistics), June 2011, Portland, Oregon, USA.
- 64. SemEval-2010 (International workshop on Semantic Evaluation), July 2010, Uppsala, Sweden.
- 65. WePS 2 (Second Web People Search Evaluation Workshop), April 2009, Madrid, Spain.

#### 3. Journal Reviews

- 1. Member of the editorial board of Heliyon (ISSN 2405-8440) since 2019
- 2. Member of the editorial board of Applied Linguistics Research Journal (ISSN 2651-2629) since 2018
- 3. Plos One (2018, 2019)
- 4. Behavior and Information Technology (2019)
- 5. Information (2019)
- 6. Language Resources and Evaluation (2011, 2013, 2014, 2016, 2017, 2018)
- 7. Transactions on Intelligent Systems and Technology (2018)
- 8. International Journal on Artificial Intelligence Tools (2018)
- 9. Transactions on Asian and Low-Resource Language Information Processing (2017)
- 10. Foundations of Computing and Decision Sciences (2017)
- 11. Swarm and Evolutionary Computation (2017)
- 12. Data and Knowledge Engineering (2016, 2019)
- 13. Computational Linguistics in the Netherlands Journal (2011, 2012, 2013, 2015, 2016, 2018, 2019, 2020)
- 14. International Journal of Metadata, Semantics and Ontologies (2015)
- 15. International Journal of Cyber-Security and Digital Forensics (2015, 2016)
- 16. SpringerPlus (2015)
- 17. Artificial Intelligence (2014)
- 18. Journal of Machine Learning Research (2014)
- 19. International Journal of Computer Science: Theory and Application (2014)
- 20. Natural Language Engineering (2013, 2019)
- 21. Journal of Information Sciences (2012)

#### 4. Bookchapter Reviews

1. *New Empirical Perspectives on Translation and Interpreting*. (2019). editors Joke Daems, Bart Defrancq and Lore Vandevoorde.

#### 5. <u>Reviewer for International Conferences:</u>

- 1. WASSA 2018 (9th Workshop on Computational Approaches to Subjectivity, Sentiment & Social Media Analysis), October 2018, Brussels, Belgium.
- 2. Webist-2016 (12<sup>th</sup> International Conference on Web Information Systems and Technologies), April 2016, Rome, Italy.
- 3. AMIA-2015 (American Medical Informatics Association), November 2015, San Francisco, USA.
- 4. EACL-2014 (International Conference on Computational Linguistics), April 2014, Gothenburg, Sweden.

- 5. STAIRS-2014 (European Starting AI Researcher Symposium), August 2014, Prague, Czech Republic.
- 6. AMIA-2014 (American Medical Informatics Association), November 2014, Washington, D.C., USA.
- 7. SemEval-2014 (International workshop on Semantic Evaluation), August 2014, Dublin, Ireland.
- 8. Cicling-2013 (International Conference on Computational Linguistics), March 2013, Samos, Greece.
- 9. SSST-7 (7<sup>th</sup> Workshop on Syntax, Semantics and Structure in Statistical Translation), June 2013, Atlanta, GA, USA.
- 10. SemEval-2013 (International workshop on Semantic Evaluation), June 2013, Atlanta, GA, USA.
- 11. IJCNLP-2013 (International Joint Conference on Natural Language Processing), October 2013, Nagoya, Japan.
- 12. ISKE-2013 (Intelligent Systems and Knowledge Engineering), November 2013, Shenzhen, China.
- 13. Coling-2012 (International Conference on Computational Linguistics), July 2012, Prague, Czech Republic.
- 14. ACL-2011 (Association for Computational Linguistics), June 2011, Portland, Oregon, USA.
- 15. DIR-2011 (Dutch-Belgian Information Retrieval Workshop), February 2011, Amsterdam, Netherlands.
- 16. ESSLLI-2011 (European Summer School in Logic, Language and Information), Language Resources and Evaluation (journal), August 2011, Ljubljana, Slovenia.
- 17. CIKM-2011 (Conference on Information and Knowledge Management), October 2011, Glasgow, UK.
- 18. BNAIC-2011 (Benelux Conference on Artificial Intelligence), November 2011, Ghent, Belgium.
- 19. ADMA-2011 (International Conference on Advanced Data Mining and Applications), August 2011, Xi'an, China.
- 20. ISKE-2011 (Intelligent Systems and Knowledge Engineering), December 2011, Shanghai, China.
- 21. RSKT-2010 (Rough Sets and Knowledge Technology), October 2010, Beijing, China.
- 22. NAACL-2010 (North-American Chapter of the Association for Computational Linguistics), June 2010, Los Angeles, USA.
- 23. SemEval-2010 (International workshop on Semantic Evaluation), July 2010, Uppsala, Sweden.
- 24. ACM CIKM 2010 (Conference on Information and Knowledge Management), October 2010, Toronto, Canada.
- 25. RANLP-2009 (Recent Advances in Natural Language Processing), April 2009, Borovets, Bulgaria.
- 26. HIS-2009 (Conference on Hybrid Intelligent Systems), August 2009, Shenyang, LiaoNing, China.

- 27. NAACL-2009 (North-American Chapter of the Association for Computational Linguistics), May 2009, Boulder, CO, USA.
- 28. EACL-2009 (International Conference on Computational Linguistics), April 2009, Athens, Greece.
- 29. ACL-2009 (Association for Computational Linguistics), August 2009, Singapore.
- 30. SEW-2009 (Semantic Evaluations: Recent Achievements and Future Directions), June 2009, Boulder, CO, USA.
- 31. Web People Search workshop, April 2009, Madrid, Spain.
- 32. RSKT-2008 (Rough Sets and Knowledge Technology), May 2008, Chengdu, China.
- 33. LREC-2008 (International Conference on Language Resources and Evaluations), May 2008, Marrakech (Morocco).

### 4. Contribution to international conferences/shared tasks

#### 1. Invited lectures

- 1. The Future of Academic Lexicography: Linguistic Knowledge Codification in the Era of Big Data and Al Workshop, Lorentz Center, Utrecht, The Netherlands: "Can we apply automatic term and concept extraction to create term bases and highly customized language tools?" (2019)
- 2. DG Connect (Connecting Europe Facility eTranslation) workshop: Implementing Terminology, Brussels, Belgium: "Extracting term candidates" (2019)
- 3. CLARIN-PLUS workshop "Creation and Use of Social Media Resources", Kaunas, Lithuania: "Text Analysis for Social Media Cybersecurity: the AMiCA Project" (2017).
- 4. HUSO 2017 (International Conference on Human and Social Analytics), Nice, France: "Text Analysis for Social Media Cybersecurity: The AMiCA Project" (2017).
- 5. TiNT 2015 (Terminologie in het Nederlandse Taalgebied), Brussels, Belgium: "Terminologieextractie – presentatie resultaten & discussie" (2015).
- 6. Computational Processing of Wine Reviews workshop, Nijmegen, Netherlands: "Applying NLP techniques to discover 'taste' and 'smell' and people's opinions in Wine Reviews" (2015).
- 7. Corpus-based perspectives on Semantic Structure in Translation Studies and Theoretical Linguistics workshop, Ghent, Belgium: "ParaSense or how to use parallel corpora for Word Sense Disambiguation" (2013)
- 8. Language and Speech Technology in Flanders (CLIF) symposium, Leuven, Belgium: "Cross-lingual Word Sense Disambiguation" (2009).

#### 2. Participation to shared tasks

- 1. SemEval-2019 (13th International Workshop on Semantic Evaluation), Task 5: multilingual detection of hate speech against immigrants and women in Twitter (hatEval), 2019.
- SemEval-2015 (International workshop on Semantic Evaluation), Denver, Colorado, USA, Task 11: Sentiment Analysis of Figurative Language in Twitter, Task 12: Aspect Based Sentiment Analysis and Task 17: Taxonomy Extraction Evaluation, 2015.
- 3. SemEval-2014 (International workshop on Semantic Evaluation), Dublin, Ireland, Task 9: Sentiment Analysis in Twitter, 2014.
- 4. WePS 2 (2nd Web People Search Evaluation Workshop), Madrid, Spain, 2009.
- 5. SemEval-2007 (International workshop on Semantic Evaluation), Prague, Czech Republic, Task 13: WePS Evaluation: Establishing a benchmark for the Web People Search Task.

#### 3. Session Chair:

- 1. RANLP 2019 (Recent Advances in Natural Language Processing), Varna, Bulgaria.
- 2. HUSO 2019 (5<sup>th</sup> International Conference on Human and Social Analytics), Rome, Italy.
- 3. CLIN 2019 (Computational Linguistics in the Netherlands), Groningen, Netherlands.
- 4. eKNOW 2016 (The Eighth International Conference on Information, Process, and Knowledge Management), Venice, Italy.
- 5. CLIN-26 (Computational Linguistics in the Netherlands), Amsterdam, Netherlands.
- 6. HUSO 2015 (International Conference on Human and Social Analytics), St. Julians, Malta.
- 7. CLIN-25 (Computational Linguistics in the Netherlands), Antwerp, Belgium.
- 8. Atila Workshop 2014, Ghent, Belgium.
- 9. SemEval-2014 (International workshop on Semantic Evaluation), Dublin, Ireland.
- 10. Atila Workshop 2013, Corsendonk, Antwerpen.
- 11. SemEval-2013 (International workshop on Semantic Evaluation), Atlanta, Georgia.
- 12. CLIN-2012 (Computational Linguistics in the Netherlands), Tilburg, Netherlands.
- 13. CLIN-2011 (Computational Linguistics in the Netherlands), Ghent, Belgium.

#### 4. Oral presentations:

- RANLP 2019 (Recent Advances in Natural Language Processing), Varna, Bulgaria: "A classification-based approach to cognate detection combining orthographic and semantic similarity information" (2019)
- 2. HUSO 2019 (International Conference on Human and Social Analytics), Rome, Itlay: "Sentiment Analysis of French Political Tweets: #MacronPrésident" (2019)
- 3. LREC 2018 (11th edition of the Language Resources and Evaluation Conference), Miyazaki (Japan): "Discovering the Language of Wine Reviews: A Text Mining Account" (2018).
- 4. TEW 2017 (Translating Europe Workshop), Rome, Italy: "Observing Eurolects. The case of the Netherlandic Dutch Language" (2017).
- 5. Atila 2017, Tilburg, The Netherlands: "Discovering the Language of Wine Reviews: A Text Mining Account" (2017).
- 6. CLARIN-PLUS workshop "Creation and Use of Social Media Resources", Kaunas, Lithuania: "Text Analysis for Social Media Cybersecurity: the AMiCA Project" (2017). [Invited Talk]
- 7. HUSO 2017 (International Conference on Human and Social Analytics), Nice, France: "Text Analysis for Social Media Cybersecurity: The AMiCA Project" (2017). [Invited Talk]
- HUSO 2017 (International Conference on Human and Social Analytics), Nice, France: "In the Eye of the Beer-Holder. Lexical Descriptors of Aroma and Taste Sensations in Beer Reviews" (2017).
- 9. HUSO 2015 (International Conference on Human and Social Analytics), St. Julians, Malta: "Automatic detection and prevention of cyberbullying" (2015). [Best presentation award]
- 10. CLIN (Computational Linguistics in the Netherlands), Amsterdam, Netherlands: "Very quaffable and great fun: Applying NLP to wine reviews" (2015).

- 11. "Computational Processing of Wine Reviews" workshop, Nijmegen, Netherlands: "Applying NLP techniques to discover 'taste' and 'smell' and people's opinions in Wine Reviews" (2015). [Invited Talk]
- 12. TiNT 2015 (Terminologie in het Nederlandse Taalgebied), Brussels, Belgium: "Terminologieextractie – presentatie resultaten & discussie" (2015).
- 13. SemEval-2014 (Workshop on Semantic Evaluations), Dublin, Ireland: "SemEval 2014 Task 5 L2 Writing Assistant." (2014).
- LREC (International Conference on Language Resources and Evaluations), Reykjavik, Iceland: "Evaluation of Automatic Hypernym Extraction from Technical Corpora in English and Dutch" (2014).
- European Commission, LEIT ICT 19 Information Day on Technologies for Creative Industries, Social Media and Convergence, Brussels, Belgium: "Sentiment Analysis for Social Media" (2014).
- 16. Workshop on "Corpus-based Perspectives on Semantic Structure in Translation Studies and Theoretical Linguistics", Ghent, Belgium: "ParaSense or how to use parallel corpora for cross-lingual Word Sense Disambiguation" (2013). [Invited Talk]
- Cicling (International Conference on Computational Linguistics), Samos, Greece: "Five languages are better than one: an attempt to bypass the language acquisition bottleneck for WSD" (2013). [third best presentation award]
- 18. SemEval-2013 (Workshop on Semantic Evaluations), Atlanta, Georgia, USA: "Task 10: Cross-Lingual Word Sense Disambiguation" (2013).
- 19. RANLP (International Conference on Recent Advances in Natural Language Processing), Hissar, Bulgaria: "A combined pattern-based and distributional approach for automatic hypernym detection in Dutch" (2013).
- 20. RANLP (International Conference on Recent Advances in Natural Language Processing), Hissar, Bulgaria: "Normalization of Dutch User-Generated Content" (2013).
- 21. Atila Workshop, Corsendonk, Antwerpen: "A combined pattern-based and distributional approach for automatic hypernym detection in Dutch" (2013).
- 22. Workshop on "Corpus-based Perspectives on Semantic Structure in Translation Studies and Theoretical Linguistics", Ghent, Belgium: "ParaSense or how to use parallel corpora for cross-lingual Word Sense Disambiguation" (2013).
- 23. CLIN 22 (Computational Linguistics in the Netherlands), Tilburg, Netherlands: "Discovering missing Wikipedia inter-language links by means of cross-lingual Word Sense Disambiguation" (2012).
- 24. LREC (International Conference on Language Resources and Evaluations), Istanbul, Turkey: "Discovering missing Wikipedia inter-language links by means of cross-lingual Word Sense Disambiguation" (2012).
- 25. ACL (Association for Computational Linguistics) 2011, Portland, Oregon, USA: "ParaSense or how to use Parallel Corpora for Word Sense Disambiguation" (2011).
- 26. BNAIC (Benelux Conference on Artificial Intelligence) 2011, Gent, België: "Using Parallel Corpora for Word Sense Disambiguation" (2011).
- 27. Atila Workshop, Antwerpen: "Discovering missing Wikipedia inter-language links by means of cross-lingual WSD" (2011).

- 28. CLIN (Computational Linguistics in the Netherlands), Utrecht: "Cross-lingual Word Sense Disambiguation" (2010).
- 29. SemEval 2010 (Workshop on Semantic Evaluations), Uppsala: "SemEval-2010 Task 3: Crosslingual Word Sense Disambiguation" (2010).
- 30. LTCI 2010 (Language Technology and Computational Intelligence Workshop), Gent: "A Multilingual Approach to Word Sense Disambiguation" (2010).
- 31. Atila Workshop, Oostende: "Examining the validity of Cross-lingual Word Sense Disambiguation" (2010).
- 32. CLIN (Computational Linguistics in the Netherlands), Groningen: "Language-independent bilingual terminology extraction from a multilingual parallel corpus" (2009).
- 33. EACL (European association for computational linguistics), Athene: "Language-independent bilingual terminology extraction from a multilingual parallel corpus" (2009).
- 34. CLIF (Language and Speech Technology in Flanders) symposium, Antwerp, Belgium: "Crosslingual Word Sense Disambiguation" (2009).
- 35. WePS 2009 (2nd Web People Search Evaluation Workshop), Madrid: "Fuzzy Ants Clustering for Web People Search" (2009).
- 36. Atila Workshop, Turnhout: "SemEval-2: Cross-lingual Word Sense Disambiguation" (2009).
- 37. CLIF (Language and Speech Technology in Flanders) symposium, Antwerpen: "Cross-lingual Word Sense Disambiguation" (2009).
- 38. AOG Workshop, Gent: "Linguistically-based sub-sentential alignment for terminology extraction from a bilingual automotive corpus" (2008).
- 39. Atila Workshop, Antwerpen: "Language independent bilingual terminology extraction from a parallel corpus" (2008).
- 40. CLIN (Computational Linguistics in the Netherlands), Nijmegen: "The Automatic Detection of Scientific Terms in Patient Information" (2007).

#### 5. <u>Poster presentations</u>

- 1. LREC 2018 (11th edition of the Language Resources and Evaluation Conference), Miyazaki (Japan): "MIsA: Multilingual "IsA" Extraction from Corpora" (2018).
- LREC-2016 (International Conference on Language Resources and Evaluations), Portorož, Slovenia: "A Classification-based Approach to Economic Event Detection in Dutch News Text" (2016).
- 3. SemEval-2015 (Workshop on Semantic Evaluations), Denver, Colorado, USA: "LT3: A Multimodular Approach to Automatic Taxonomy Construction (2015).
- 4. SemEval-2015 (Workshop on Semantic Evaluations), Denver, Colorado, USA: "LT3: Sentiment Analysis of Figurative Tweets: a piece of cake. #NotReally (2015).
- 5. SemEval-2015 (Workshop on Semantic Evaluations), Denver, Colorado, USA: "Applying Hybrid Terminology Extraction to Aspect Based Sentiment Analysis. Proceedings of the 9th International Workshop on Semantic Evaluation (2015).
- 6. SemEval-2014 (Workshop on Semantic Evaluations), Dublin, Ireland: "LT3: Sentiment Classification in User-Generated Content Using a Rich Feature Set" (2014).

- 7. CICLING (Conference on Intelligent Text Processing and Computational Linguistics) 2011, Tokyo, Japan: "Examining the Validity of Cross-Lingual Word Sense Disambiguation" (2011).
- 8. CLIN 21 (Computational Linguistics in the Netherlands), Gent: "ParaSense or how to use Parallel Corpora for Cross-lingual Word Sense Disambiguation" (2011).
- 9. SSST-5 workshop, Portland, Oregon, USA: "An Evaluation and Possible Improvement Path for Current SMT Behavior on Ambiguous Nouns" (2011)
- 10. LREC (International Conference on Language Resources and Evaluations), "Construction of a Benchmark Data Set for Cross-Lingual Word Sense Disambiguation" (2010).
- 11. Doctoraatssymposium Faculteit Wetenschappen UGent: "Parasense: A parallel corpus for Dutch Word Sense Disambiguation" (2009).
- 12. SEW 2009 (Workshop on Semantic Evaluations: Recent Achievements and Future Directions), Boulder, Colorado: "SemEval-2010 Task 3: Cross-lingual Word Sense Disambiguation" (2009).
- 13. LREC (International Conference on Language Resources and Evaluations), Marrakesh: "Learning-based Detection of Scientific Terms in Patient Information" (2008).
- 14. Benelearn (Belgian-Dutch Conference on Machine Learning), Amsterdam: "A combined classification and clustering approach for Web People Disambiguation" (2007).
- 15. SemEval 2007 ACL (Association for Computational Linguistics), Praag: "A combined classification and clustering approach for Web People Disambiguation" (2007).

#### 5. Membership of scholarly committees

- 1. Member of the FWO funded Scientific Research Network "Digital Humanities Flanders"
- 2. Information officer of SIGLEX, a Special Interest Group on the Lexicon of the Association for Computational Linguistics.
- 3. Member of the Association for Computational Linguistics (ACL).
- 4. Co-Director of the Ghent Center for Digital Humanities (CDH) (2019)
- 5. Member of the SemEval (International Workshop on Semantic Evaluation) 2020 Steering Committee
- 6. Head of the UGent Terminology Centre (CvT: Centrum voor Terminologie)