

Dr. Ilia Markov

Curriculum Vitae

(short version, extended version available upon request)



Assistant Professor

Computational Linguistics & Text Mining Lab (CLTL),
Vrije Universiteit Amsterdam

[Google Scholar](#) • [ResearchGate](#) • [LinkedIn](#)

Personal information

- Phone: (+31) 628 54 99 08
- E-mail: i.markov@vu.nl
- Date of birth: 05/08/1983

Work experience

- **Assistant professor**, January 2022 – present
Computational Linguistics & Text Mining Lab (CLTL), Vrije Universiteit Amsterdam,
Amsterdam, The Netherlands
- **Postdoctoral researcher**, June 2019 – December 2021
Centre for Computational Linguistics and Psycholinguistics (CLiPS), University of Antwerp,
Antwerp, Belgium
Project: “[The Linguistic Landscape of Hate Speech in Social Media](#)”
Advisor: [Dr. Walter Daelemans](#)
- **Postdoctoral researcher**, June 2018 – May 2019
Automatic Language Modelling and Analysis & Computational Humanities (ALMAAnaCH)
Team, French Institute for Research in Computer Science and Automation (INRIA), Paris, France
Project: “Automatic Analysis of Citizens’ Debates”
Advisor: [Dr. Eric Villemonte De la Clergerie](#)

Education

- **PhD (with honors), Computer Science, 2014 – 2018, GPA 10/10**
Natural Language Processing Laboratory, Center for Computing Research (CIC),
Instituto Politécnico Nacional (IPN), Mexico City, Mexico
PhD thesis: [“Automatic Native Language Identification”](#)
Advisors: [Dr. Grigori Sidorov](#), Dr. Obdulia Pichardo Lagunas
- **MSc, Language Sciences, 2012 – 2014, GPA 17/20**
University of Algarve, Faro, Portugal
MSc thesis: [“Automatic Identification of Whole-Part Relations in Portuguese”](#)
Advisors: [Dr. Jorge Baptista](#), [Dr. Nuno Mamede](#)
- **BSc (with honors), Computer Engineering, 2001 – 2006, GPA 5/5**
Kaliningrad State Technical University, Russia
BSc thesis: “Automatic Estimation of Stocking Norms”
Advisor: Dr. Olga Toporkova

Research experience (Natural Language Processing, AI)

- Hate speech detection, sentiment analysis, opinion mining
- Information retrieval, information extraction, text mining, argument mining, text similarity
- Native language identification, native language interference, discriminating between similar languages, author profiling, authorship attribution
- Corpus linguistics, lexical resources
- Computational semantics, semantic relations extraction
- Human-computer interaction

Teaching experience

- 2023–2024: Text Mining for AI, XB_0085, Vrije Universiteit Amsterdam (6 ECTS)
- 2023–2024: Forensic Linguistics 3: Methods of Authorship Analysis, L_AAMPLIN016, Vrije Universiteit Amsterdam (6 ECTS)
- 2023–2024: Subjectivity Mining, L_AAMPLIN018, Vrije Universiteit Amsterdam (6 ECTS)
- 2022–2023: Text Mining for AI, XB_0085, Vrije Universiteit Amsterdam (6 ECTS)
- 2022–2023: Applied Text Mining 1: Methods, L_PAMATLW004, Vrije Universiteit Amsterdam (6 ECTS)
- 2022–2023: Subjectivity Mining, L_AAMPLIN018, Vrije Universiteit Amsterdam (6 ECTS)
- 2021–2022: Natural Language Processing Technology, L_AAMAALG005, Vrije Universiteit Amsterdam (6 ECTS)
- 2021–2022: Text Mining, L_PABAALG002, Vrije Universiteit Amsterdam (6 ECTS)
- 2021–2022: Applied Text Mining 1: Methods, L_PAMATLW004, Vrije Universiteit Amsterdam (6 ECTS)

- 2021–2022: Natural Language Processing, UA_2007FLWDTA, University of Antwerp (6 ECTS)
- 2020–2021: Natural Language Processing, UA_2007FLWDTA, University of Antwerp (6 ECTS)
- 2019–2020: Computational Linguistics, UA_2010FLWTAA, University of Antwerp (6 ECTS)
- 2017–2018: Natural language processing, Instituto Politécnico Nacional
- 2016–2017: Information retrieval, Instituto Politécnico Nacional

Supervision

- 2023–present: Stefan F. Schouten, PhD thesis “Combining Intuitive and Reflective Inference in Natural Language Understanding Systems”, CLTL, Vrije Universiteit Amsterdam (co-supervisor)
- 2023–present: Wondimagegnhue Tufa, PhD thesis “Language Models for Low-Resource Languages, Dialectics, and Domains”, CLTL, Vrije Universiteit Amsterdam (co-supervisor)
- 2024: master’s thesis “Exploring Models’ Performance for Abusive Language Detection: The Case of Obfuscated Abusive Terms”, CLTL, Vrije Universiteit Amsterdam
- 2023: master’s thesis “Exploring Cross-Lingual Language Models for Detecting Toxic Spans: The Case of Dutch”, CLTL, Vrije Universiteit Amsterdam
- 2023: master’s thesis “Automatic Generation of Personalized Counter Narratives Based on User Profile”, CLTL, Vrije Universiteit Amsterdam
- 2023: master’s thesis “Multimodal Hate Speech Detection with CLIP: Identifying Hateful Content in Memes”, CLTL, Vrije Universiteit Amsterdam
- 2023: master’s thesis “From Words to Images: Exploring the Crucial Role of Textual Modality in Multimodal Hate Speech Detection”, CLTL, Vrije Universiteit Amsterdam
- 2023: master’s thesis “Multi-Task Fine-Tuning for Hate Speech Detection”, CLTL, Vrije Universiteit Amsterdam
- 2022: master’s thesis “Evaluating a Transformer-Based Language Model for In-Domain and Cross-Domain Offensive Language Detection on Perturbed Data”, CLTL, Vrije Universiteit Amsterdam
- 2022: master’s thesis “Automatic Retrieval of Topics Using Topic Modelling Techniques from Customer Conversations in the Airline Domain”, CLTL, Vrije Universiteit Amsterdam
- 2022: master’s thesis “Automatic Topic Classification of Customer Feedback in the Banking Domain”, CLTL, Vrije Universiteit Amsterdam
- 2022: master’s thesis “An Evaluation of Linguistic Features for Automatic Detection of Socially Unacceptable Discourse on Social Media”, CLiPS, University of Antwerp
- 2022: master’s thesis “The Effects of Posterior Cortical Atrophy on Written Language”, CLiPS, University of Antwerp

- 2021: master's thesis "Linguistic Changes in Terry Pratchett's Writing as an Indication of Posterior Cortical Atrophy", CLiPS, University of Antwerp
- 2021: master's thesis "Context in Online Hate Speech: Error Analysis of the Performance of BERTje", CLiPS, University of Antwerp
- 2021: master's thesis "Detecting Vaccination Hesitancy in Online Comments", CLiPS, University of Antwerp
- 2021: master's thesis "A Close-up on BERT: Performing a Qualitative Error Analysis for Sarcasm Detection in Dutch Headlines", CLiPS, University of Antwerp
- 2020: master's thesis "Cross-Lingual Age Detection on English and German Tweets: Evaluating the Impact of Individual Parts of Speech", CLiPS, University of Antwerp
- 2018: BSc thesis "Syllables as Features for the Authorship Attribution Task", ESIME, Instituto Politécnico Nacional (IPN)

Keynotes, invited talks, PhD committee

- External PhD committee member. Jens Van Nooten, PhD thesis "Multi-label Text Classification", CLiPS, University of Antwerp, Belgium, upcoming.
- External PhD committee member. Jens Lemmens, PhD thesis "Sweeping the Social Minefield: Detecting Online Opinions and Emotions with NLP", CLiPS, University of Antwerp, Belgium, May 31, 2024.
- Keynote: "Combating Multilingual Hate Speech Online: Challenges & Research Directions". Third International conference on Speech & Language Technologies for Low-resource Languages (SPELLL-2024), Chennai, India (virtual), 04–06 December, 2024 (upcoming).
- Invited talk: "An Interdisciplinary Perspective on Countering Harmful Multimodal Content". Workshop on The Interdisciplinary Approaches to the Study of Safety and Danger in the Digital World, The Hague, The Netherlands, 27–28 June, 2024 (upcoming).
- Invited talk: "Profiling Hate Speech Spreaders & Personalizing Counter Narratives against Hate Speech". Conference on Harmful Online Communication (CHOC 2023), Cologne, Germany, November 16–17, 2023.
- Invited talk: "Hate Speech Detection: Challenges & Research Directions". Huawei's Cloud Service Helsinki NLP/NLU Workshop 2022, Helsinki, Finland, December 16, 2022.
- Invited talk: "A Multilingual Perspective on Hate Speech Detection in Social Media". IPHSE-2: Interdisciplinary Perspectives on Hate Speech 2021, Hildesheim, Germany, November 11–12, 2021.

Academic service

- Editorial board member: Computational Linguistics in the Netherlands Journal
- Senior area chair: The 2024 Joint International Conference on Computational Linguistics, Language Resources and Evaluation (LREC-COLING 2024) – Offensive and Harmful Language Detection and Analysis Track

Publications

Journals

1. L. Hilte, I. Markov, N. Ljubešić, D. Fišer, W. Daelemans. Who are the Haters? A Corpus-Based Demographic Analysis of Authors of Hate Speech. *Frontiers in Artificial Intelligence*, vol. 6, 2023. ([DOI](#))
JCR impact factor: 0.264
2. I. Gevers, I. Markov, W. Daelemans. Linguistic Analysis of Toxic Language on Social Media. *Computational Linguistics in the Netherlands Journal*, vol. 12, pp. 33–48, 2022. ([PDF](#))
JCR impact factor: 0.47
3. J. Lemmens, T. Dejaeghere, T. Kreutz, J. Van Nooten, I. Markov, W. Daelemans. Vaccinpraat: Monitoring Vaccine Skepticism in Dutch Twitter and Facebook Comments. *Computational Linguistics in the Netherlands Journal*, vol. 11, pp. 173–188, 2022. ([PDF](#))
JCR impact factor: 0.47
4. J. Van Nooten, I. Markov, W. Daelemans. Evaluating the Impact of Word Classes on Cross-Domain Age Detection Models' Performance. *Computational Linguistics in the Netherlands Journal*, vol. 11, pp. 71–84, 2022. ([PDF](#))
JCR impact factor: 0.47
5. I. Markov, V. Nastase, C. Strapparava. Exploiting Native Language Interference for Native Language Identification. *Natural Language Engineering*, pp. 1–31, 2020. ([DOI](#))
JCR impact factor: 1.465
6. H. Gómez, R. Fuentes, I. Markov, G. Sidorov, A. Gelbukh. A Convolutional Neural Network Approach for Gender and Language Variety Identification. *Journal of Intelligent & Fuzzy Systems*, vol. 36, no. 5, pp. 4845–4855, 2019. ([DOI](#))
JCR impact factor: 1.426

7. G. Sidorov, I. Markov, O. Kolesnikova, L. Chanona. Human Interaction with Shopping Assistant Robot in Natural Language. *Journal of Intelligent & Fuzzy Systems*, vol. 36, no. 5, pp. 4889–4899, 2019. ([DOI](#))
JCR impact factor: 1.426
8. I. Markov, J. Baptista, O. Pichardo. Authorship Attribution in Portuguese Using Character N-grams. *Acta Polytechnica Hungarica*, vol. 14, no. 3, pp. 59–78, 2017. ([DOI](#), [PDF](#))
JCR impact factor: 0.745
9. G. Sidorov, M. Ibarra, I. Markov, R. Guzman, L. Chanona, F. Velásquez. Measuring Similarity Between Karel Programs Using Character and Word N-grams. *Programming and Computer Software*, vol. 43, no. 1, pp. 47–50, 2017. ([DOI](#), [PDF preprint](#))
JCR impact factor: 0.230
10. H. Gómez, I. Markov, G. Sidorov, J.-P. Posadas, M. Sanchez, L. Chanona. Improving Feature Representation Based on a Neural Network for Author Profiling in Social Media Texts. *Computational Intelligence and Neuroscience*, vol. 2016, 13 pages, 2016. ([DOI](#))
JCR impact factor: 1.215
11. G. Sidorov, M. Ibarra, I. Markov, R. Guzman, L. Chanona, F. Velásquez. Automatic Detection of Similarity of Programs in Karel Programming Language based on Natural Language Processing Techniques. *Computación y Sistemas*, vol. 20, no. 2, pp. 279–288, 2016. ([DOI](#), [PDF](#))
Scopus Q2
12. H. Gómez, I. Markov, G. Sidorov, J.-P. Posadas, C. Fócil. Compiling a Lexicon of Social Media for the Author Profiling Task. *Research in Computing Science*, vol. 115, pp. 19–27, 2016. ([PDF](#))
DBLP
13. I. Markov, N. Mamede, J. Baptista. A Rule-Based Meronymy Extraction Module for Portuguese. *Computación y Sistemas*, vol. 19, no. 4, pp. 661–683, 2015. ([DOI](#), [PDF](#))
Scopus Q2

Conferences, workshops, and chapters in books

1. Y. Wang, I. Markov. CLTL@HarmPot-ID: Leveraging Transformer Models for Detecting Offline Harm Potential and Its Targets in Low-Resource Languages. In: *Fourth Workshop on Threat, Aggression & Cyberbullying @ LREC-COLING-2024 (TRAC 2024)*, Turin, Italy. ELRA and ICCL, pp. 21–26, May 20, 2024. ([PDF](#))
Ranked 1st in the TRAC 2024 Shared Task on Offline Harm Potential Identification.

2. W. T. Tufa, I. Markov, P. Vossen. The Constant in HATE: Toxicity in Reddit across Topics and Languages. In: *Fourth Workshop on Threat, Aggression & Cyberbullying @ LREC-COLING-2024 (TRAC 2024)*, Turin, Italy. ELRA and ICCL, pp. 1–11, May 20, 2024. ([PDF](#))
3. Y. Wang, I. Markov. CLTL@Multimodal Hate Speech Event Detection 2024: The Winning Approach to Detecting Multimodal Hate Speech and Its Targets. In: *7th Workshop on Challenges and Applications of Automated Extraction of Socio-political Events from Text (CASE 2024)*, St. Julians, Malta, ACL, pp. 73–78, March 21–22, 2024. ([PDF](#))
Ranked 1st in the Multimodal Hate Speech Event Detection shared task 2024.
4. S. F. Schouten, P. Bloem, I. Markov, P. Vossen. Reasoning about Ambiguous Definite Descriptions. In: *Findings of the Association for Computational Linguistics: EMNLP 2023*, Singapore, ACL, pp. 4479–4484, December 6–10, 2023. ([DOI](#))
5. M. Doğanç, I. Markov. From Generic to Personalized: Investigating Strategies for Generating Targeted Counter Narratives against Hate Speech. In: *1st Workshop on CounterSpeech for Online Abuse (CS4OA 2023)*, Prague, Czech Republic, ACL, pp. 1–12, September 11, 2023. ([PDF](#))
6. N. Yuzbashyan, N. Banar, I. Markov, W. Daelemans. An Exploration of Zero-Shot Natural Language Inference-Based Hate Speech Detection. In: *Third Workshop on Language Technology for Equality, Diversity and Inclusion (LT-EDI 2023)*, Varna, Bulgaria, ACL, pp. 1–9, September 7, 2023. ([PDF](#))
7. S. F. Schouten, B. Barbarestani, W. Tufa, P. Vossen, I. Markov. Cross-Domain Toxic Spans Detection. In: *28th International Conference on Natural Language & Information Systems (NLDB 2023)*, Derby, United Kingdom, LNCS, Springer, vol. 13913, pp. 533–545, June 21–23, 2023. ([DOI](#))
8. J. Lemmens, I. Markov, W. Daelemans. The LiLaH Emotion Lexicon of Greek, Kurdish, Turkish, Spanish, Farsi and Chinese. *CLiPS Technical Report Series*, CTRS-009, 2023. ([PDF](#))
9. I. Markov, W. Daelemans. The Role of Context in Detecting the Target of Hate Speech. In: *Third Workshop on Threat, Aggression and Cyberbullying (TRAC 2022)*, Gyeongju, Republic of Korea, ACL, pp. 37–42, October 17, 2022. ([PDF](#))
10. I. Markov, I. Gevers, W. Daelemans. An Ensemble Approach for Dutch Cross-Domain Hate Speech Detection. In: *27th International Conference on Natural Language & Information Systems (NLDB 2022)*, Valencia, Spain, LNCS, Springer, vol. 13286, pp. 3–15, June 15–17, 2022. ([DOI](#))

11. M. Kestemont, E. Manjavacas, I. Markov, J. Bevendorff, M. Wiegmann, E. Stamatatos, B. Stein, M. Potthast. Overview of the Cross-Domain Authorship Verification Task at PAN 2021. In: *Working Notes of CLEF 2021 – Conference and Labs of the Evaluation Forum*, Bucharest, Romania. CEUR, vol. 2936, pp. 1743–1759, September 21–24, 2021. ([PDF](#))
12. J. Lemmens, I. Markov, W. Daelemans. Improving Hate Speech Type and Target Detection with Hateful Metaphor Features. In: *Fourth Workshop on NLP for Internet Freedom: Censorship, Disinformation, and Propaganda (NLP4IF 2021)*, Online, ACL, pp. 7–16, June 6, 2021. ([PDF](#))
13. I. Markov, W. Daelemans. Improving Cross-Domain Hate Speech Detection by Reducing the False Positive Rate. In: *Fourth Workshop on NLP for Internet Freedom: Censorship, Disinformation, and Propaganda (NLP4IF 2021)*, Online, ACL, pp. 17–22, June 6, 2021. ([PDF](#))
14. I. Markov, N. Ljubešić, D. Fišer, W. Daelemans. Exploring Stylometric and Emotion-Based Features for Multilingual Cross-Domain Hate Speech Detection. In: *Eleventh Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA 2021)*, Online, ACL, pp. 149–159, April 19, 2021. ([PDF](#))
15. J. Bevendorff, B. Chulvi, G. L. De La Peña Sarracén, M. Kestemont, E. Manjavacas, I. Markov, M. Mayerl, M. Potthast, F. Rangel, P. Rosso, E. Stamatatos, B. Stein, M. Wiegmann, M. Wolska, E. Zangerle. Overview of PAN 2021: Authorship Verification, Profiling Hate Speech Spreaders on Twitter, and Style Change Detection. In: *43rd European Conference on Information Retrieval (ECIR 2021)*, Online, LNCS, Springer, vol. 12657, pp. 567–573, March 28 – April 1, 2021. ([DOI](#))
16. N. Ljubešić, I. Markov, D. Fišer, W. Daelemans. The LiLaH Emotion Lexicon of Croatian, Dutch and Slovene. In: *Third Workshop on Computational Modeling of People's Opinions, Personality, and Emotion's in Social Media (PEOPLES 2020)*, Barcelona, Spain (Online), ACL, pp. 153–157, December 13, 2020. ([PDF](#))
17. E. Lotfi, I. Markov, W. Daelemans. A Deep Generative Approach to Native Language Identification. In: *28th International Conference on Computational Linguistics (COLING 2020)*, Barcelona, Spain (Online), International Committee on Computational Linguistics, pp. 1778–1783, December 8–13, 2020. ([DOI](#))
18. J. Bevendorff, B. Ghanem, A. Giachanou, M. Kestemont, E. Manjavacas, I. Markov, M. Mayerl, M. Potthast, F. Rangel, P. Rosso, G. Specht, E. Stamatatos, B. Stein, M. Wiegmann, E. Zangerle. Overview of PAN 2020: Authorship Verification, Celebrity Profiling, Profiling Fake News Spreaders on Twitter, and Style Change Detection. In: *Experimental IR Meets Multilinguality, Multimodality, and Interaction (CLEF 2020)*, Thessaloniki, Greece. LNCS, Springer, vol. 12260, pp. 372–383, September 22–25, 2020. ([DOI](#))

19. M. Kestemont, E. Manjavacas, I. Markov, J. Bevendorff, M. Wiegmann, E. Stamatatos, M. Potthast, B. Stein. Overview of the Cross-Domain Authorship Verification Task at PAN 2020. In: *Working Notes of CLEF 2020 – Conference and Labs of the Evaluation Forum*, Thessaloniki, Greece. CEUR, vol. 2696, September 22–25, 2020. ([PDF](#))
20. J. Lemmens, B. Burtenshaw, E. Lotfi, I. Markov, W. Daelemans. Sarcasm Detection Using an Ensemble Approach. In: *Second Workshop on Figurative Language Processing (FigLang 2020)*, Online, ACL, pp. 264–269, July 9, 2020. ([DOI](#))
21. I. Markov, V. Nastase, C. Strapparava. Anglicized Words and Misspelled Cognates in Native Language Identification. In: *14th Workshop on Innovative Use of NLP for Building Educational Applications (BEA14 2019)*, Florence, Italy. ACL, pp. 275–284, August 2, 2019. ([PDF](#))
22. I. Markov, E. De la Clergerie. INRIA at SemEval-2019 Task 9: Suggestion Mining Using SVM with Handcrafted Features. In: *13th International Workshop on Semantic Evaluation (SemEval-2019)*, Minneapolis, Minnesota, USA. ACL, pp. 1204–1207, June 6–7, 2019. ([PDF](#))
23. I. Markov, G. Sidorov. CIC-IPN@INLI2018: Indian Native Language Identification. In: *Working Notes of FIRE 2018 – 10th International Forum for Information Retrieval Evaluation*, Gandhinagar, India. CEUR-WS.org, vol. 2266, pp. 82–88, December 06–09, 2018. ([PDF](#))
24. I. Markov, V. Nastase, C. Strapparava, G. Sidorov. The Role of Emotions in Native Language Identification. In: *9th Workshop on Computational Approaches to Subjectivity, Sentiment and Social Media Analysis (WASSA 2018)*, Brussels, Belgium. ACL, pp. 123–129, October 31, 2018. ([DOI](#), [PDF](#))
25. I. Markov, H. Gómez, M. Jasso-Rosales, G. Sidorov. CIC-GIL Approach to Author Profiling in Spanish Tweets: Location and Occupation. In: *Third Workshop on Evaluation of Human Language Technologies for Iberian Languages (IberEval 2018)*, Seville, Spain. CEUR-WS.org, vol. 2150, pp. 97–101, September 18, 2018. ([PDF](#))
26. I. Markov, V. Nastase, C. Strapparava. Punctuation as Native Language Interference. In: *27th International Conference on Computational Linguistics (COLING 2018)*, Santa Fe, New Mexico, USA. The COLING 2018 Organizing Committee, pp. 3456–3466, August 20–26, 2018. ([PDF](#))
27. I. Markov, H. Gómez, G. Sidorov, A. Gelbukh. The Winning Approach to Cross-Genre Gender Identification in Russian at RUSProfiling 2017. In: *Working Notes of FIRE 2017 – 9th International Forum for Information Retrieval Evaluation*, Bangalore, India. CEUR-WS.org, vol. 2036, pp. 20–24, December 08–10, 2017. ([PDF](#))
Ranked 1st in the PAN RUSProfiling shared task 2017.

28. I. Markov, L. Chen, C. Strapparava, G. Sidorov. CIC-FBK Approach to Native Language Identification. In: *12th Workshop on Innovative Use of NLP for Building Educational Applications (BEA12 2017)*, Copenhagen, Denmark. ACL, pp. 374–381, September 8, 2017. ([PDF](#))

Ranked 1st in the NLI shared task 2017

29. M. Sanchez, I. Markov, H. Gómez, G. Sidorov. Comparison of Character n-grams and Lexical Features on Author, Gender, and Language Variety Identification on the Same Spanish News Corpus. In: *Experimental IR Meets Multilinguality, Multimodality, and Interaction (CLEF 2017)*, Dublin, Ireland. LNCS, Springer, vol. 10456, pp. 145–151, September 11–14, 2017. ([DOI](#))

30. I. Markov, H. Gómez, G. Sidorov. Language- and Subtask-Dependent Feature Selection and Classifier Parameter Tuning for Author Profiling. In: *Working Notes of CLEF 2017 – Conference and Labs of the Evaluation Forum*, Dublin, Ireland. CEUR, vol. 1866, September 11–14, 2017. ([PDF](#))

31. I. Markov, E. Stamatatos, G. Sidorov. Improving Cross-Topic Authorship Attribution: The Role of Pre-Processing. In: *18th International Conference on Computational Linguistics and Intelligent Text Processing (CICLing 2017)*, Budapest, Hungary. Springer, vol. 10762, pp. 289–302, April 17–23, 2017. ([DOI](#), [PDF preprint](#))

Best poster award, third place

32. H. Gómez, I. Markov, J. Baptista, G. Sidorov, D. Pinto. Discriminating between Similar Languages Using a Combination of Typed and Untyped Character N-grams and Words. In: *4th Workshop on NLP for Similar Languages, Varieties and Dialects (VarDial 2017)*, Valencia, Spain. ACL, pp. 137–145, April 3, 2017. ([PDF](#))

33. I. Markov, H. Gómez, J.-P. Posadas, G. Sidorov, A. Gelbukh. Author Profiling with Doc2vec Neural Network-Based Document Embeddings. In: *15th Mexican International Conference on Artificial Intelligence (MICAI 2016)*, Cancún, Mexico. Part II, LNAI, Springer, vol. 10062, pp. 117–131, October 23–29, 2016. ([DOI](#), [PDF preprint](#))

Best paper award, first place

34. I. Markov, H. Gómez, G. Sidorov, A. Gelbukh. Adapting Cross-Genre Author Profiling to Language and Corpus. In: *Working Notes of CLEF 2016 – Conference and Labs of the Evaluation Forum*, Évora, Portugal. CEUR, vol. 1609, pp. 947–955, September 5–8, 2016. ([PDF](#))

35. J. Baptista, I. Markov. Morphosyntactic processes involving body-part nouns in Portuguese. In: *Perspectives Harrissiennes*. CRL - Cellule de Recherche en Linguistique, pp. 255–267, 2016. ([PDF](#))

36. G. Sidorov, H. Gómez, I. Markov, D. Pinto, N. Loya. Computing Text Similarity using Tree Edit Distance. In: *Annual Conference of the North American Fuzzy Information Processing Society (NAFIPS)*, joint with 2015 5th World Conference on Soft Computing (WConSC), Redmond, WA, USA. IEEE, pp. 1–4, August 17–19, 2015. ([DOI](#), [PDF](#))
37. H. Gómez, G. Sidorov, D. Pinto, I. Markov. A Graph Based Authorship Identification Approach. In: *Working Notes of CLEF 2015 – Conference and Labs of the Evaluation Forum*, Toulouse, France. CEUR, vol. 1391, September 8–11, 2015. ([PDF](#))
38. J.-P. Posadas, I. Markov, H. Gómez, G. Sidorov, I. Batyrshin, A. Gelbukh, O. Pichardo. Syntactic N-grams as Features for the Author Profiling Task. In: *Working Notes of CLEF 2015 – Conference and Labs of the Evaluation Forum*, Toulouse, France. CEUR, vol. 1391, September 8–11, 2015. ([PDF](#))
39. I. Markov, N. Mamede, J. Baptista. Whole-Part Relations Rule-Based Automatic Identification: Issues from Fine-Grained Error Analysis. In: *13th Mexican International Conference on Artificial Intelligence (MICA I 2014)*, Tuxtla Gutiérrez, Mexico. Springer, vol. 8856, pp. 37–50, November 16–22, 2014. ([DOI](#), [PDF preprint](#))
40. I. Markov, N. Mamede, J. Baptista. Automatic Identification of Whole-Part Relations in Portuguese. In: *3rd Symposium on Languages, Applications and Technologies (SLATE 2014)*, Bragança, Portugal. Dagstuhl Publishing, vol. 38, pp. 225–232, June 19–20, 2014. ([DOI](#), [PDF](#))
41. J. Baptista, N. Mamede, I. Markov. Integrating Verbal Idioms into an NLP System. In: *11th International Conference on the Computational Processing of the Portuguese Language (PROPOR 2014)*, São Carlos, SP, Brazil. Springer, vol. 8775, pp. 250–255, October 6–9, 2014. ([DOI](#), [PDF preprint](#))
42. I. Markov, N. Mamede, J. Baptista. Body-Part Nouns and Whole-Part Relations. In: *11th International Conference on the Computational Processing of the Portuguese Language (PROPOR 2014)*, São Carlos, SP, Brazil. Springer, vol. 8775, pp. 125–136, October 6–9, 2014. ([DOI](#), [PDF preprint](#))
43. J. Baptista, N. Mamede, I. Markov. Integrating a Lexicon-Grammar of Verbal Idioms in a Portuguese NLP System. In: *2nd PARSEME General Meeting*, Athens, Greece, March 10–11, 2014.