

Francielle Vargas
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<https://francielleavargas.github.io/>

Education	<p><i>PhD, Computer Science and Computational Mathematics</i> University of São Paulo Thesis: Responsible and Explainable Fact-Checking and Hate Speech Detection. 2019 - 2024</p> <p><i>MSc, Computer Science and Computational Mathematics</i> University of São Paulo Thesis: Semantic Clustering of Aspects for Opinion Mining. see 2015 - 2017</p> <p><i>BA, Linguistics</i> Federal University of Minas Gerais</p> <p><i>BS, Information Systems</i> Pontifical Catholic University of Minas Gerais</p>
Experience	<p>2024/2024: <i>Google PhD Fellowship</i>, Federal University of Minas Gerais, Brazil</p> <p>2024/2024: <i>Visiting Researcher</i>, University of Southern California, USA</p> <p>2023/2023: <i>Invited Researcher</i>, Leibniz Institute for the Social Sciences, Germany</p> <p>2021/2022: <i>Data Scientist</i>, Cisco Webex, USA</p> <p>2015/2023: <i>Graduate Researcher</i>, University of São Paulo, Brazil</p> <p>2014/2015: <i>System Analyst</i>, Unisys, Brazil</p>
Data Resources	<p>HateBR: A Benchmark Expert Hate Speech Dataset of Brazilian Instagram comments</p> <p>FactNews: A Sentence-Level Annotated Dataset To Predict Factuality and Media Bias</p> <p>HausaHate: A Benchmark Dataset for Hausa Hate Speech Detection</p> <p>OPCovidBR: A Aspect-based Annotated Dataset of Covid-19 Tweets For Opinion Mining</p> <p>AspectPRO: Aspect-based Annotated Dataset of Consumer Reviews for Opinion Mining</p> <p>PRO: A Set of Taxonomies for Aspect-based Opinion Mining</p> <p>MOL: A Context-Aware Multilingual Offensive Lexicon</p>
New Methods	<p>B+M: An Optimized Bag-of-Words Model by Contextual Lexicon for Explainable Hate Speech Detection</p> <p>SSA: A Post-Hoc Explanation Method by Stereotypes and Counter-Stereotypes to Assess Social Bias in Hate Speech Classifiers</p> <p>FACT: Sentence-Level News Source Reliability Estimation</p>
Computer Programs	<p>OPCluster-PT: A System for Extraction and Clustering of Fine-Grained Opinions</p> <p>NoHateBrazil: A Brazilian Portuguese Text Offensiveness Analysis System</p>

Context-Aware and Expert Data Resources for Brazilian Portuguese Hate Speech Detection

Francielle Vargas, Isabelle Carvalho, Thiago Pardo, Fabrício Benevenuto
Natural Language Engineering Journal. [see](#)

Discourse Annotation Guideline for Low-Resource Languages

Vargas, F., Schmeisser-Nieto, W., Rabinovich, Z., Benevenuto, F., Pardo, T.A.S.
Natural Language Engineering Journal. [see](#)

HausaHate: An Expert Annotated Corpus for Hausa Hate Speech Detection

Vargas, F., Guimarães, S., Alves, D., Muhammad, H. S., Abdulmumin, I., Ahmad, I. S., Mohamed, D., Pardo, T.A.S., Benevenuto, F.
Workshop Proceedings of the 2024 North American Chapter of the Association for Computational Linguistics (WOAH @ NAACL 2024). [see](#)

Extended Multimodal Hate Speech Event Detection During Russia-Ukraine Crisis

Thapa, S, Rauniyar, K., Jafri, F. A., Veeramani, H., Jain, R., Jain, S., Vargas, F., Hürriyetoğlu, A., Naseem, U.
Workshop Proceedings of the 14th Recent Advances in Natural Language Processing (CASE @ RANLP 2024). [see](#)

2023

Predicting Sentence-Level Factuality of News and Bias of Media Outlets

Vargas, F., Jaidka, K., Pardo, T.A.S., Benevenuto, F.
Recent Advances in Natural Language Processing (RANLP). [see](#)

Socially Responsible Hate Speech Detection: Can Classifiers Reflect Social Stereotypes?

Vargas, F., Carvalho, I., Hürriyetoğlu, A., Pardo, T.A.S., Benevenuto, F.
Recent Advances in Natural Language Processing (RANLP). [see](#)

NoHateBrazil: A Brazilian Portuguese Text Offensiveness Analysis System

Vargas, F., Carvalho, I., Schmeisser-Nieto, W., Benevenuto, F., Pardo, T.A.S.
Recent Advances in Natural Language Processing (RANLP). [see](#)

Multimodal Hate Speech Detection

Thapa, S., Jafri, F. A., Hürriyetoğlu, A., Vargas, F., Lee, R. K., Naseem, U.
Workshop Proceedings of the 17th Conference of the European Chapter of the Association for Computational Linguistics (CASE @ EACL 2023). [see](#)

2022

HateBR: A Large Expert Annotated Corpus of Brazilian Instagram Comments for Abusive Language Detection

Vargas, F., Carvalho, I., Góes, F.R., Pardo, T.A.S., Benevenuto, F.
13th Conference on Language Resources and Evaluation (LREC). [see](#)

Rhetorical Structure Approach for Online Deception Detection: A Survey

Vargas, F., D'Alessandro, J., Rabinovich, Z., Benevenuto, F., Pardo, T.A.S.
13th Conference on Language Resources and Evaluation (LREC). pp.5906-5915.

Studying Dishonest Intentions in Brazilian Portuguese Texts

Vargas, F., Pardo, T.A.S.
Deceptive AI. Springer: Communications in Computer and Information Science. [see](#)

Extended Multilingual Protest News Detection

Hurriyetoglu, A., Mutlu, O., San, F. D., Uca, O., Gurel, A. S., Radford, B., Dai, Y., Hettiarachchi, H., Stoeck, N., Nomoto, T., Slavcheva, M., Vargas, F., Javid, A., Beyhan, F., Yoruk, E.

Workshop Proceedings of the 2022 Conference on Empirical Methods in Natural Language Processing (CASE @ EMNLP 2022). [see](#)

2021

Contextual-Lexicon Approach for Abusive Language Detection

Vargas, F., Góes, F.R., Carvalho, I., Pardo, T.A.S., Benevenuto, F.

Recent Advances in Natural Language Processing (RANLP). [see](#)

Towards Discourse-Aware Models for Multilingual Fake News Detection

Vargas, F., Benevenuto, F., Pardo, T.A.S.

Recent Advances in Natural Language Processing (RANLP). [see](#)

Implicit Opinion Aspect Clues in Portuguese Texts: Analysis and Categorization

Machado, M. T., Pardo, T.A.S., Ruiz, E. E. S., Di Felippo, A., Vargas, F.

15th International Conference on the Computational Processing of Portuguese (PROPOR).

[see](#)

2020 and before

Linguistic Rules for Fine-Grained Opinion Extraction

Vargas, F., Pardo, T.A.S.

Workshop Proceedings of the 14th International AAAI Conference on Web and Social Media (SocialSens @ ICWSM 2020). [see](#)

Identifying Fine-Grained Opinion and Classifying Polarity on Coronavirus Pandemic

Vargas, F., Santos, R.S.S., F., Rocha, P.R.

9th Brazilian Conference on Intelligent Systems (BRACIS 2020). [see](#)

Aspect Clustering Methods for Sentiment Analysis

Vargas, F., Pardo, T.A.S.

13th International Conference on the Computational Processing of Portuguese (PROPOR 2018). [see](#)

Invited Speaker

2024: [Invited Researcher] [MOLA - Language & Morality Lab](#)
University of Southern California (USC). Los Angeles, California
Title: *Fighting Misinformation and Polarization: Socially Responsible and Explainable Language Technologies for Fact-Checking and Hate Speech Detection*. [see](#)

2024: [Keynote Speaker] [Conference cum Conclave on Emerging trends in Journalistic and Media Practices](#)
DG Vaishnav College (DDGDV). Chennai, India
Title: *Predicting Sentence-Level News Source Reliability for Fact-Checking*. [see](#)

2023: [Keynote Speaker] [Conference on Harmful Online Communication](#)
Leibniz Institute for the Social Sciences (GESIS), Cologne, Germany
Title: *Countering Harmful Online Communication in Brazil: Predicting Fine-Grained Factuality of News and Offensive Context of Social Media Comment*. [see](#)

**Organizing and
Program
Committee****Organizing Committee**

1. Data(set) Co-chair. *ICWSM 2023*. [see](#)
2. Accessibility Chair. *ICWSM 2022*. [see](#)
3. Diversity, Equity, and Inclusion Chair. *ICWSM 2021*. [see](#)
4. Steering Committee. 6th CASE@RANLP 2023. [see](#)
5. Steering Committee. 5th CASE@EMNLP 2022. [see](#)

Program Committee

- *ACL* (2023)
 - *EMNLP* (2024)(2023)(2022)
 - *LREC* (2024)
 - *NAACL* (2024) (2022)
 - *ICWSM* (2025)
 - *CIKM* (2024)(2023)
 - *HICSS*(2023)
 - *WOAH* (*NAACL 2024*)(*ACL 2023*) (*NAACL-HLT 2022*)
 - *FEVER* (*EACL 2023*)
 - *SoCal NLP* (2022)
 - *CODI* (*EACL 2024*)(*ACL 2023*) (*COLING 2022*)
 - *ARGMINING-CMNA* (*ICLP 2023*) (*COLING 2022*) (*COMMA 2022*)
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**Conference
Participation**

NAACL 2024. [see](#)
RANLP 2023. [see](#)
ACL 2023. [see](#)
LREC 2022. [see](#)
RANLP 2021. [see](#)
ICWSM 2021. [see](#)
ACL 2020. [see](#)
EMNLP 2020. [see](#)
LREC 2020. [see](#)
BRACIS 2020. [see](#)

**Awards
& Honors**

Google Latin America Research Awards (LARA 2024)
NAACL Diversity & Inclusion Award (NAACL 2024)
Outstanding Academic Project and Honorable Mention (UFMG 2013)
Outstanding Academic Project and Honorable Mention (UFMG 2012)

Courses

2019-2019: *Introduction on the Stars - Astrophysics*, University of São Paulo. [see](#)
2016-2016: *The R language with an emphasis on probability*, University of São Paulo. [see](#)
2014-2020: *Software Engineering*, Pontifical Catholic University of Minas Gerais. [see](#)

Summer School

2024-2024: 2nd Mexican NLP Summer School, NAACL 2024, Mexican. [to appear](#)
2023-2023: 2nd Summer School on Deep Learning in NLP, RANLP 2024, Bulgaria. [see](#)
2022-2022: 2nd Advanced NLP School, Université Grenoble Alpes, France. [see](#)
2021-2021: 4th Advanced School in Big Data Analysis, University of São Paulo, Brazil. [see](#)
2020-2020: 10th Lisbon Machine Learning School, INESC, Portugal. [see](#)
2015-2015: 4th Summer School in Computer Science, DCC-UFMG, Brazil. [see](#)

Adviser

CS Undergraduate: Lucas Sobral Fontes Cardoso, University of São Paulo, 2020.
Thesis: *Web resources for an aspect identification and clustering tool in fine-grained opinion mining.* [see](#)

**Recommendation
Letters**

Fabrizio Benevenuto. *DCC-UFMG*. [letter](#)
Norah Abokhodair. *Microsoft Research*. [letter](#)
Roseli Romero. *ICMC-USP*. [letter](#)
Carlos Ramisch. *LIS-CNRS-Aix Marseille Université*. [letter](#)

Coding

Python, NLTK, spaCy, Gensim, Keras, Tensorflow, PyTorch, SQL, RDF(s), OWL, Unix.