Francielle Vargas

francielleavargas@usp.br

https://franciellevargas.github.io/

Education

PhD, Computer Science and Computational Mathematics

University of São Paulo

Thesis: Socially Responsible and Explainable Fact-Checking and Hate Speech Detec-

tion. 2019 - 2024

MSc, Computer Science and Computational Mathematics

University of São Paulo

Thesis: Semantic Clustering of Aspects for Opinion Mining see

2015 - 2017

BA, Linguistics

Federal University of Minas Gerais

BSc, Information Systems

Pontifical Catholic University of Minas Gerais

Keynote Speaker Leibniz Institute for the Social Sciences (GESIS), 2023

Conference on Harmful Online Communication. Cologne, Germany

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

Computational Social Science and Cultural Analytics Track (2023) Discourse and Pragmatics Track (2023)

• EMNLP

Computational Social Science and Cultural Analytics Track (2022) (2023) Discourse and Pragmatics Track (2022) (2023)

• LREC

Offensive and Harmful Language Detection and Analysis Track (2024) Discourse and Pragmatics Track (2024)

• NAACL

Computational Social Science and Cultural Analytics Track(2024) Discourse and Pragmatics Track (2024)

NAACL Student Research Workshop (2022) (2024)

• ICWSM

Dataset and Demo Track (2023)

• CIKM

Dataset and Demo Track (2023)

• HICSS

Digital and Social Media Track (2023)

• WOAH

Workshop on Online Abuse and Harms (ACL 2023) (NAACL-HLT 2022)

• FEVER

6th Fact Extraction and VERification (EACL 2023)

• CODI

Workshop on Computational Approaches to Discourse (EACL 2024)(ACL 2023) (COLING 2022)

• ARGMINING-CMNA

Workshop on Argument Mining and Workshop on Computational Models of Natural Argument (ICLP 2023) (COLING 2022) (COMMA 2022)

SoCal NLP

5th Southern California Natural Language Processing Symposium (2022)

Awards & Honors

2024: Latin America Research Awards (LARA), Google

2013: Outstanding Academic Achievement, UFMG.

2012: Outstanding Academic Achievement, UFMG.

Publications

2024

HausaHate: An Expert Annotated Corpus for Hausa Hate Speech Detection

<u>Vargas, F.,</u> Guimarães, S., Alves, D., Muhammad, H. S., Abdulmumin, I., Ahmad, I. S., Mohamed, D., Pardo, T.A.S., Benevenuto, F.

8th Workshop on Online Abuse and Harms (NAACL), pp. 1-6. Mexico City, Mexico. accepted

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

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

Natural Language Engineering Journal. pp.1-21. accepted

Discourse Annotation Guideline for Low-Resource Languages

Vargas, F., Schmeisser-Nieto, W., Rabinovich, Z., Benevenuto, F., Pardo, T.A.S. Natural Language Engineering Journal. pp.1-33. accepted

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.

7th International Workshop Challenges and Applications of Automated Extraction of Socio-Political Events from Text (EACL). pp.221–228. St. Julians, Malta. see

2023

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). pp.1-10. Varna, Bulgaria. see

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). pp.1-10. Varna, Bulgaria. see

NoHateBrazil: A Brazilian Portuguese Text Offensiveness Analysis System

<u>Vargas, F., Carvalho, I., Schmeisser-Nieto, W., Benevenuto, F., Pardo, T.A.S.</u>
<u>Recent Advances in Natural Language Processing (RANLP). pp.1-7. Varna, Bulgaria.</u>

Multimodal Hate Speech Detection

Thapa, S., Jafr, F. A., Hürriyetoğlu, A., <u>Vargas</u>, F., Lee, R. K., Naseem, U. 6th International Workshop Challenges and Applications of Automated Extraction of Socio-Political Events from Text (RANLP). pp.1-9. Varna, Bulgaria. see

2022

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. Marseille, France. see

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). pp.7174–7183. Marseille, France. see

Studying Dishonest Intentions in Brazilian Portuguese Texts

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

Deceptive AI. Springer, vol 1296. pp.166–178. see

Extended Multilingual Protest News Detection

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

5th International Workshop Challenges and Applications of Automated Extraction of Socio-Political Events from Text (EMNLP). pp.223–228. Abu Dhabi, Arab Emirates. see

2021

Contextual-Lexicon Approach for Abusive Language Detection

<u>Vargas, F.</u>, Góes, F.R., Carvalho, I., Pardo, T.A.S., Benevenuto, F. <u>Recent Advances in Natural Language Processing (RANLP). pp.1442-1451. Held</u>

Online.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), pp.210-218. Held Online. 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 (PRO-POR). pp.68-78. Fortaleza, Brazil. see

2020

Linguistic Rules for Fine-Grained Opinion Extraction

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

5th International Workshop on Social Sensing: Special Edition on Narrative Analysis on Social Media (ICWSM). pp.1-6. Held Online. 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), pp.511-520. Rio Grande, Brazil. see

2019 and before

Aspect Clustering Methods for Sentiment Analysis

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

13th International Conference on the Computational Processing of Portuguese (PRO-POR), pp.365-374. Canela, Brazil. see

The Coreference Annotation of the CSTNews Corpus

Pardo, T.A.S., Baptista, J., Duran, M.S., Nunes, M.G.V., Nóbrega, F.A.A., Aluísio, S.M., Di Felippo, A., Seno, E.R.M., Silva, R.R., Anchieta, R.T., Brum, H.B., Dias, M.S., Martins, R.S.O., Maziero, E.G., Souza, J.W.C., Vargas, F.

2nd Workshop on Evaluation of Human Language Technologies for Iberian Language (SEPLN). pp.102-112. Murcia, Spain. see

Organized

Book published / Por que amo Llansol?

Bittencourt, A.; Costa, F. A.; Vargas, F. A.

Publicações Viva Voz, FALE/UFMG: Belo Horizonte: 34p. ISBN 978-85-7758-227-3. pdf

Experience

Research experience

2024/2024: Researcher Visiting, University of Southern California (USC)

2015/2023: Graduate Researcher, University of São Paulo (USC).

2011/2014: Undergraduate Researcher, Federal University of Minas Gerais (UFMG).

Teaching experience

SCC5809: Neural Networks and Deep Learning University of São Paulo, 2021. see SCC0605: Theory of Computation and Compilers, University of São Paulo, 2020. see

SCC0227: Computation Topics Seminars, University of São Paulo, 2016. see

Industry experience

2021/2023: Doctoral Researcher, Sinch 2021/2022: Data Scientist, Cisco Webex 2014/2015: System Analyst, Unisys

Conference Participation NAACL 2024. to appear 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

Adviser

Computer Science Undergraduate Student: Lucas Sobral Fontes Cardoso

Web resources for an aspect identification and clustering tool in fine-grained opinion mining.

University of São Paulo, 2020. see

Summer School / Courses 2023-2023: 2nd Summer School on Deep Learning in NLP, RANLP, Bulgaria. see

 $2022\mbox{-}2022\mbox{:}$ 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

2014-2020: Software Engineering (specialization). 360h. PUCMinas, Brazil. see

Computer Programs

OPCluster: Automatic extraction and clustering of fine-grained opinions. NoHateBrazil: A Brazilian Portuguese text offensiveness analysis system.

FACTual: Automated fact-checking and news credibility.

Data Resources

FactNews: Sentence-level annotated dataset to predict factuality and media bias. HateBR: Large-scale abusive language dataset of Brazilian Instagram comments.

HausaHate: A hate speech dataset of Facebook comments for the Hausa language.

OPCovidBR: Aspect-based sentiment analysis dataset of Covid-19 Tweets.

AspectPRO: Aspect-based annotated dataset of web consumer reviews.

Deceiver: Multilingual discourse-annotated dataset of fake and true news.

PRO: Taxonomies for aspect-based sentiment analysis in Portuguese.

MOL: Multilingual offensive lexicon.

Recommendation Letters Prof. Dr. Fabricio Benevenuto. DCC-UFMG. letter Dra. Norah Abokhodair. Microsoft Research. letter

Prof. Dra. Roseli Romero. ICMC-USP. letter

Prof. Dr. Carlos Ramisch. LIS-CNRS-Aix Marseille Université. letter