Francielle Vargas

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https://franciellevargas.github.io/

Education

PhD, Computer Science and Computational Mathematics

University of São Paulo

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

Experience

2024/2024: Google LARA Fellow, Federal University of Minas Gerais

2024/2024: Visiting Researcher, University of Southern California, USA

2023/2023: Invited Researcher, Leibniz Institute for the Social Sciences, Germany

2021/2022: Data Scientist, Cisco Webex

2015/2023: Graduate Researcher, University of São Paulo

2014/2015: System Analyst, Unisys, Brazil

2010/2014: Research Assistant, Federal University of Minas Gerais

2008/2010: System Analyst, Barcelos Advogados Associados

Data Resources

HateBR: The large-scale abusive language dataset of Brazilian Instagram comments FactNews: The sentence-level annotated dataset to predict factuality and media bias HausaHate: A hate speech dataset of Facebook comments for Hausa language OPCovidBR: The aspect-based sentiment analysis dataset of Covid-19 Tweets AspectPRO: Aspect-based annotated dataset of web consumer reviews

PRO: Taxonomies for aspect-based sentiment analysis in Portuguese

MOL: Multilingual offensive lexicon

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 source reliability

Publications 2024

HausaHate: An Expert Annotated Corpus for Hausa Hate Speech Detection

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

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

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. 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. pp.1-33. see

Extended Multimodal Hate Speech Event Detection During Russia-Ukraine Crisis

Thapa, S, Rauniyar, K., Jafri, F. A., Veeramani, H., Jain, R., Jain, S., $\underline{\text{Vargas, F.}}$, 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?

 $\frac{\text{Vargas, F., Carvalho, I., Hürriyetoğlu, A., Pardo, T.A.S., Benevenuto, F.}{\text{Recent Advances in Natural Language Processing (RANLP). pp.1-10. Varna, Bulgaria. see}$

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

Vargas, F., Carvalho, I., Schmeisser-Nieto, W., Benevenuto, F., Pardo, T.A.S.

Recent Advances in Natural Language Processing (RANLP). pp.1-7. Varna, Bulgaria. see

Multimodal Hate Speech Detection

Thapa, S., Jafr, F. A., Hürriyetoğlu, A., <u>Vargas, F.</u>, 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.

 $\overline{13\text{th Conf}}$ erence 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.

 $\overline{13\text{th Conf}}$ erence on Language Resources and Evaluation (LREC). pp.7174–7183. Marseille, France. 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

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

Recent Advances in Natural Language Processing (RANLP), pp.1442-1451. Held 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 (PROPOR). pp.68-78. Fortaleza, Brazil. see

2020 and before

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 (SocialSens @ ICWSM 2020). 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 2020). pp.511-520. Rio Grande, Brazil. see

Aspect Clustering Methods for Sentiment Analysis

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

13th International Conference on the Computational Processing of Portuguese (PROPOR 2018). 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 (Iber
Eval 2 @ SEPLN 2027). pp.102-112. Murcia, Spain. 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

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, Brazil. 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)(2024)(2023)
- 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)

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

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

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

Coding

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