

# Curriculum Vitae

## Personal Information

- Full name: Felipe José Bravo Márquez
- Nationality: Chile.
- Date of Birth: 3rd of January 1984.
- Chile Address: Avenida Beauchef 851, of. 304, Piso 3, Edificio Norte, Santiago, Chile / C.P. 837-0456
- Phone number: +56 2 2978 4974
- New Zealand Address: Department of Computer Science - Tari Rorohiko, The University of Waikato.
- E-mail : fbravo at dcc.uchile.cl / fbravoma at waikato.ac.nz
- Public profiles: personal website, DCC Uchile, FCFM Uchile, IMFD, Uchile, Google Scholar, GitHub, DBLP, ResearchGate, Scopus, Semantic Scholar, Publons, ACL Anthology, Youtube, Twitter.
- Areas of Interest: Natural language processing, Data mining, Data science, Machine learning, Information retrieval, Social media analytics, Computational social science, Artificial Intelligence, Statistics.

## Academic Positions and Work Experience

- [2019 - present] Assistant Professor, Department of Computer Science, University of Chile.
- [2021 - present] Associate Researcher, National Center for Artificial Intelligence Research (CENIA) .
- [2019 - present] Young Researcher, Millennium Institute for Foundational Research on Data (IMFD).
- [2020 - present] Associate Member, Te Ipu o te Mahara, The Artificial Intelligence Institute at the University of Waikato.
- [2019 - present] Honorary Research Associate, Machine Learning Group, University of Waikato.
- [2017-2019] Research Fellow, Machine Learning Group, University of Waikato.
- [2011-2013] Research Engineer, Yahoo! Labs Latin America.
- [2009- 2011] Researcher and Software Developer, Web Intelligence Consortium Chile Research Centre.
- [2009] Internship, Simple, Software Developer.

- [2009] Internship, Previred, Business Process Management Area.
- [2005-2006] Internship, Vitanet, Software Developer.

## Qualifications

- PhD. Computer Science, University of Waikato (Jul. 2017)
- MSc. Computer Science, Universidad de Chile (Sep. 2013)
- Computer Science Engineer, Universidad de Chile (Nov. 2010)
- Industrial Engineer, Universidad de Chile (Nov. 2010)
- BSc. in Industrial Engineering, Universidad de Chile (Oct. 2010)
- BSc. Computer Science, Universidad de Chile (Jan. 2009)

## Teaching

- [CC6104] (Lecturer) Statistical Thinking (spring 2021), Computer Science Department, Universidad de Chile
- [CC66S] (Lecturer) Machine Learning (spring 2020), Computer Science Department, Universidad de Chile (Professional Diploma in Artificial Intelligence)
- [CC6205] (Lecturer) Natural Language Processing (fall 2021, fall 2020, spring 2019), Computer Science Department, Universidad de Chile
- [CC5206] (Lecturer) Introduction to Data Mining (fall 2021, spring 2020, fall 2020, spring 2019, fall 2019), Computer Science Department, Universidad de Chile
- [CC66E] (Lecturer) Data Mining (fall 2019), Computer Science Department, Universidad de Chile (Professional Diploma in Data Science)
- [COMP321] (Lecturer) Practical Data Mining (spring 2018), Department of Computer Science, University of Waikato
- (Lecturer) Deep Learning for Natural Language Processing (June 2018) IfI Summer School 2018 on Machine Learning, Department of Informatics, University of Zurich.
- [COMP321] (Tutor) Practical Data Mining (spring 2017), Department of Computer Science, University of Waikato
- (Lecturer) Databases Management Diploma (spring 2013), Department of Informatics Engineering (postgraduate), Universidad Técnica Federico Santa María
- [CC5206/CC71Q] (Lecturer) Data Mining (spring 2012), Computer Science Department (undergraduate and postgraduate), Universidad de Chile

- [IN72K] (Lecturer) Information Technologies and Business Process Re-design (fall 2011), Master in Operations Management, Universidad de Chile
- [IN4522] (TA) Web Mining (spring 2010), Industrial Engineering, Universidad de Chile
- [IN7B0] (TA) ICT for globalization (spring 2010), Master in Management for Globalization, Universidad de Chile

## Grants

### As Principal Investigator

- [2020 - ongoing] FONDECYT de Iniciación. Project Title: Tracking social public opinion: a stream-mining based approach.
- [2020 - ongoing] U-INICIA (CONCURSO DE REFORZAMIENTO DE INSERCIÓN PRODUCTIVA DE NUEVOS ACADÉMICOS VID UCHILE). Project Title (in Spanish): Inducción Incremental de Léxicos Afectivos desde Twitter.

### As Investigator

- [2019-2020] False News on Facebook during the 2017 Chilean Elections: Analyzing Its Content, Diffusion, and Audience Characteristic, The Social Science Research Council.

## Service

- Area Chair: EMNLP 2020 track “Sentiment Analysis, Stylistic Analysis, and Argument Mining”.
- Conference Program Committees: AAAI 2021, ACL 2021, TheWebConf 2021, ACL 2020, WISDOM 2020, NAACL 2019, LA-WEB 2019, WASSA 2018, WISDOM 2018, SEM-EVAL 2018, IJCAI-ECAI 2018, EMNLP 2017, WASSA 2017
- Journal Reviewing: ACM Transactions on the Web (TWEB), The Visual Computer (TVCJ), PeerJ Computer Science, Journal of Machine Learning Research, Natural Language Engineering, IEEE Transactions on Knowledge and Data Engineering, Knowledge-based Systems, ACM Transactions on Intelligent Systems and Technology (TIST), IEEE Computational Intelligence Magazine special issue on Computational Intelligence for Natural Language Processing.
- Grant reviewing: Fondecyt de Iniciación en Investigación 2022.
- University Administration: [2020-ongoing] member of the academic committee of the Master in Data Science at the University of Chile, [2019-

2019] I participated in the elaboration of the Master in Data Science at the University of Chile.

- Technology transfer: [2020-2021] As part of an IMFD agreement, I assisted the Supreme Court of Chile in the development of an automatic classifier of court rulings.

## Scholarships and Awards

- [2021] Best Full-time Teaching Award, Department of Computer Science, University of Chile.
- [2017] University of Waikato Doctoral Publications Scholarship.
- [2016] IEEE student travel grant to attend the 2016 IEEE/WIC/ACM International Conference on Web Intelligence in Omaha, Nebraska, USA.
- [2014-2017] University of Waikato Doctoral Scholarship.
- [2011-2012] National Scientific and Technological Research Commission (CONICYT) Scholarship for master's degree studies at Chilean Universities.

## Publications

### Journal Papers

1. P. Baéz, F. Bravo-Marquez, J. Dunstan, M. Rojas, and F. Villena Automatic Extraction of Nested Entities in Clinical Referrals in Spanish. In *ACM Transactions on Computing for Healthcare (HEALTH)*, Volume 3, Issue 3, July 2022. Pages 1–22. DOI:10.1145/3498324 (pdf)
2. J. Diaz, F. Bravo-Marquez and B. Poblete, Language Modeling on Location-Based Social Networks. In *ISPRS International Journal of Geo-Information*, Volume 11, Number 2, Article Number 147. DOI: 10.3390/ijgi11020147 (pdf)
3. F. Bravo-Marquez and C. Tamblay Words, Tweets and Reviews: Leveraging Affective Knowledge Between Multiple Domains. In *Cognitive Computation*, Volume 14, January 2022. Pages 388-406. DOI: 10.1007/s12559-021-09923-9 (pdf)
4. F. Bravo-Marquez, A. Khanchandani, and B. Pfahringer Incremental word-vectors for time-evolving sentiment lexicon induction. In *Cognitive Computation*, Volume 14, January 2022. Pages 425-441. DOI:10.1007/s12559-021-09831-y (pdf)
5. F. Tobar, F. Bravo-Marquez, J. Dunstan, J. Fontbona, A. Maass, and D. Remenik, and J.F. Silva Data Science for Engineers: A Teaching Ecosystem. In *IEEE Signal Processing Magazine*, Volume 38, Issue 3, May 2021. Pages 144-153. DOI:10.1109/MSP.2021.3053551 (pdf)

6. J. Diaz, B. Poblete, and F. Bravo-Marquez An Integrated Model for Textual Social Media Data with Spatio-Temporal Dimensions. In *Information Processing & Management*, Volume 57, Issue 5, 2020. DOI:10.1016/j.ipm.2020.102219 (pdf)
7. D.G. Trye, A.S. Calude, F. Bravo-Marquez, and T.T. Keegan Hybrid Hashtags: #YouKnowYoureAKiwiWhen your Tweet contains Māori and English. In *Frontiers in Artificial Intelligence, section Language and Computation* Volume 3, Article 15, April 2020. DOI: 10.3389/frai.2020.00015. (pdf|supplementary Material)
8. F. Bravo-Marquez, E. Frank, B. Pfahringer, and S. M. Mohammad AffectiveTweets: a WEKA Package for Analyzing Affect in Tweets. In *Journal of Machine Learning Research* 20(92): Pages 1–6, 2019. (pdf)
9. S. Lang, F. Bravo-Marquez, C. Beckham, M. Hall, and E. Frank WekaDeepLearning4j: a Deep Learning Package for Weka based on DeepLearning4j. In *Knowledge-Based Systems*, Volume 178, 15 August 2019, Pages 48-50. DOI: 10.1016/j.knosys.2019.04.013 (pdf)
10. F. Bravo-Marquez, E. Frank, and B. Pfahringer Transferring Sentiment Knowledge between Words and Tweets. In *Web Intelligence* Volume 16, no. 4, 31 October 2018, Pages 203-220. DOI: 10.3233/WEB-180389 (pdf)
11. F. Bravo-Marquez, E. Frank, and B. Pfahringer Building a Twitter Opinion Lexicon from Automatically-annotated Tweets. In *Knowledge-Based Systems* Volume 108, 15 September 2016, Pages 65–78. DOI:10.1016/j.knosys.2016.05.018 (pdf)
12. J.D. Velásquez, Y. Covacevich, F. Molina, E. Marrese-Taylor, C. Rodríguez, and F. Bravo-Marquez DOCODE 3.0 (DOCUMENT COPY DETECTOR): A system for plagiarism detection by applying an information fusion process from multiple documental data sources. In *Information Fusion* Volume 27, January 2016, Pages 64–75. DOI:10.1016/j.inffus.2015.05.006 (pdf)
13. E. Marrese-Taylor, J.D. Velásquez, F. Bravo-Marquez A Novel Deterministic Approach for Aspect-Based Opinion Mining in Tourism Products Reviews. In *Expert Systems with Applications* Volume 41, Issue 17, 1 December 2014, Pages 7764–7775. DOI:10.1016/j.eswa.2014.05.045 (pdf)
14. F. Bravo-Marquez, M. Mendoza and B. Poblete Meta-Level Sentiment Models for Big Social Data Analysis. In *Knowledge-Based Systems* Volume 69, October 2014, Pages 86–99. DOI:10.1016/j.knosys.2014.05.016 (pdf)

## Conference and Workshop Papers

1. H. Sarmiento, F. Bravo-Marquez, E. Graells-Garrido, and B. Poblete Identifying and Characterizing new Expressions of Community Framing during

- Polarization. In *Proceedings of the 16th The International AAAI Conference on Web and Social Media (ICWSM)*, Atlanta, Georgia, USA. (to appear)
2. V. Araujo, A. Caravallo, S. Kundu, J. Cañete, M. Mendoza, R. E. Mercer, F. Bravo-Marquez, M. Moens, and A. Soto Evaluation Benchmarks for Spanish Sentence Representations. In *Proceedings of the 13th Edition of The Language Resources and Evaluation Conference (LREC)*, Marseille, France. (to appear)
  3. J. Cañete, S. Donoso, F. Bravo-Marquez, A. Caravallo, and V. Araujo ALBETO and DistilBETO: Lightweight Spanish Language Models. In *Proceedings of the 13th Edition of The Language Resources and Evaluation Conference (LREC)*, Marseille, France. (to appear)
  4. A. Ansell, F. Bravo-Marquez, and B. Pfahringer PolyLM: Learning about Polysemy through Language Modeling. In *Proceedings of the 16th conference of the European Chapter of the Association for Computational Linguistics (EACL 2021)*, Kyiv, Ukraine. Pages 563–574. (pdf),(code).
  5. J. Cerezo, A. Bergel, and F. Bravo-Marquez Tools Impact on the Quality of Annotations for Chat Untangling. In *Proceedings of the Joint Conference of the 59th Annual Meeting of the Association for Computational Linguistics and the 11th International Joint Conference on Natural Language Processing: Student Research Workshop*, Bangkok, Thailand. Pages 215–220 (pdf)
  6. J. Muñoz and F. Bravo-Marquez Interventions Recommendation: Professionals’ Observations Analysis in Special Needs Education. In *Proceedings of the 16th Workshop on Innovative Use of NLP for Building Educational Applications (BEA 2021)*, Co-located with EACL 2021, Kyiv, Ukraine. Pages 171–179 (pdf),(code).
  7. P. Badilla, F. Bravo-Marquez, and J. Pérez WEFÉ: The Word Embeddings Fairness Evaluation Framework. In *Proceedings of the 29th International Joint Conference on Artificial Intelligence (IJCAI 2020)*, Yokohama, Japan. Pages 430–436. DOI:10.24963/ijcai.2020/60. Acceptance rate: 12.6%. (pdf),(code).
  8. F. D. Zamora-Reina, F. Bravo-Marquez DCC-Uchile at SemEval-2020 Task 1: Temporal Referencing Word Embeddings. In *Proceedings of International Workshop on Semantic Evaluation (SemEval-2020)*, Barcelona, Spain, 2020. Pages 194–200. (pdf)
  9. A. Ansell, F. Bravo-Marquez, and B. Pfahringer An ELMo-inspired approach to SemDeep-5’s Word-in-Context task. In *Proceedings of the 5th Workshop on Semantic Deep Learning (SemDeep-5) co-located with IJCAI 2019 in Macau, China*. (pdf)

10. D. Trye, A. S. Calude, F. Bravo-Marquez, and T. T Keegan Māori Loan-words: A Corpus of New Zealand English Tweets. In *Proceedings of the 2019 ACL Student Research Workshop (SRW)*, Florence, Italy. (pdf)
11. F. Bravo-Marquez, S. Reeves, and M. Ugarte Proof-of-Learning: a Blockchain Consensus Mechanism based on Machine Learning Competitions. In *Proceedings of the 2019 IEEE International Conference on Decentralized Applications and Infrastructures (DAPPCON)*, April 2019, East Bay, San Francisco, California, USA. Pages 119-124. DOI:10.1109/DAPPCON.2019.00023. (pdf)
12. S. M. Mohammad, F. Bravo-Marquez, M. Salameh, and S. Kiritchenko Semeval-2018 Task 1: Affect in tweets. In *Proceedings of International Workshop on Semantic Evaluation (SemEval-2018)*, New Orleans, LA, USA, June 2018. (pdf)|(leaderboard)
13. S. M. Mohammad and F. Bravo-Marquez WASSA-2017 Shared Task on Emotion Intensity, In *Proceedings of the EMNLP 2017 Workshop on Computational Approaches to Subjectivity, Sentiment, and Social Media (WASSA)*, September 2017, Copenhagen, Denmark. (pdf)
14. S. M. Mohammad and F. Bravo-Marquez Emotion Intensities in Tweets, In *\*Sem '17: Proceedings of the sixth joint conference on lexical and computational semantics (\*Sem)*, August 2017, Vancouver, Canada. (pdf)
15. F. Bravo-Marquez, E. Frank, S. M. Mohammad, and B. Pfahringer Determining Word-Emotion Associations from Tweets by Multi-Label Classification, In *WI '16: Proceedings of the 2016 IEEE/WIC/ACM International Conference on Web Intelligence*, Omaha, Nebraska, USA 2016. Pages 536-539. DOI:10.1109/WI.2016.90 (pdf)
16. F. Bravo-Marquez, E. Frank, and B. Pfahringer From opinion lexicons to sentiment classification of tweets and vice versa: a transfer learning approach, In *WI '16: Proceedings of the 2016 IEEE/WIC/ACM International Conference on Web Intelligence*, Omaha, Nebraska, USA 2016. Pages 145-152. DOI:10.1109/WI.2016.29 (pdf)
17. F. Bravo-Marquez, E. Frank, and B. Pfahringer Annotate-Sample-Average (ASA): A New Distant Supervision Approach for Twitter Sentiment Analysis, In *ECAI '16: Proceedings of the 22nd Biennial European Conference on Artificial Intelligence*. The Hague, Holland 2016. IOS press. DOI:10.3233/978-1-61499-672-9-498 (pdf)
18. F. Bravo-Marquez, E. Frank, and B. Pfahringer Positive, Negative, or Neutral: Learning an Expanded Opinion Lexicon from Emoticon-annotated Tweets, In *IJCAI '15: Proceedings of the 24th International Joint Conference on Artificial Intelligence*. Buenos Aires, Argentina 2015.(pdf)|(poster)
19. F. Bravo-Marquez, E. Frank, and B. Pfahringer From Unlabelled Tweets

- to Twitter-specific Opinion Words, In *SIGIR '15: Proceedings of the 38th International ACM SIGIR Conference on Research & Development in Information Retrieval*. Santiago, Chile 2015. DOI:10.1145/2766462.2767770 (pdf)|(poster)
20. E. Marrese-Taylor, J.D. Velásquez, F. Bravo-Marquez OpinionZoom, a modular tool to explore tourism opinions on the Web, In *WI '2013: IEEE/WIC/ACM International Conference on Web Intelligence*. Industry Track. Atlanta, USA. DOI:10.1109/WI-IAT.2013.19 (pdf)
  21. M. Mendoza, F. Bravo-Marquez, B. Poblete, and D. Gayo-Avello Long-memory Time Series Ensembles for Concept Shift Detection, In *KDD-BigMine '13 2nd International Workshop on Big Data, Streams and Heterogeneous Source Mining: Algorithms, Systems, Programming Models and Applications*. Chicago, USA 2013. DOI:10.1145/2501221.2501225 (pdf)
  22. F. Bravo-Marquez, M. Mendoza and B. Poblete Combining Strengths, Emotions and Polarities for Boosting Twitter Sentiment Analysis, In *KDD-WISDOM '13: 2nd Workshop on Issues of Sentiment Discovery and Opinion Mining*. Chicago, USA 2013. DOI:10.1145/2502069.2502071 (pdf)
  23. E. Marrese-Taylor, J.D. Velásquez, F. Bravo-Marquez, Y. Matsuo Identifying Customer Preferences about Tourism Products using an Aspect-Based Opinion Mining Approach, In *KES '13: 17th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems*. Kitakyushu, Japan, 2013. Procedia Computer Science. DOI:10.1016/j.procs.2013.09.094 (pdf)
  24. F. Bravo-Marquez, D. Gayo-Avello, M. Mendoza and B. Poblete Opinion Dynamics of Elections in Twitter, In *LA-WEB '12: 8th Latin American Web Congress*. Cartagena de Indias, Colombia, 2012. IEEE Computer Society's Conference Publishing Services (CPS). DOI:10.1109/LA-WEB.2012.11 (pdf)
  25. F. Bravo-Marquez and M. Manriquez A Zipf-Like Distant Supervision Approach for Multi-Document Summarization Using Wikinews Articles, In *SPIRE '12: 19th International Symposium on String Processing and Information Retrieval*. Cartagena de Indias, Colombia, 2012. Springer-Verlag. DOI:10.1007/978-3-642-34109-0\_15 (pdf)
  26. F. Bravo-Marquez, G. L'Huillier, P. Moya, S.A. Rios, and J.D. Velasquez An Automatic Text Comprehension Classifier Based on Mental Models and Latent Semantic Features, In *I-KNOW '2011: 11th International Conference on Knowledge Management and Knowledge Technologies*. Grass, Austria. ACM ICPS. DOI:10.1145/2024288.2024317 (pdf)
  27. F. Bravo-Marquez, G. L'Huillier, S.A. Rios, and J.D. Velasquez A Text Similarity Meta-Search Engine Based on Document Fingerprints and Search Results Records, In *WI '2011: IEEE/WIC/ACM International*



*Conference on Web Intelligence.* Lyon, France. DOI:10.1109/WI-IAT.2011.27 (pdf)

28. F. Bravo-Marquez, G. L’Huillier, S. Rios, and J.D. Velasquez Hypergeometric Language Model and Zipf-like Scoring Function for Web Document Similarity Retrieval, In *SPIRE ’10: 17th International Symposium on String Processing and Information Retrieval*. Los Cabos, Mexico, 2010. Springer-Verlag. DOI:10.1007/978-3-642-16321-0\_32 (pdf)
29. F. Bravo-Marquez, G. L’Huillier, S. Rios, J.D. Velasquez, and L. Guerrero DOCODE-lite: A Meta-Search Engine for Document Similarity Retrieval, In *KES ’10: 14th International Conference on Knowledge-Based and Intelligent Information & Engineering Systems*. Cardiff, Wales, 2010. Springer-Verlag. DOI:10.1007/978-3-642-15390-7\_10 (pdf)

### Non-peer reviewed articles

1. F. Bravo-Marquez and J. Dunstan Procesamiento de Lenguaje Natural: dónde estamos y qué estamos haciendo, In *Revista Bits de Ciencia* Volume 21 Pages 45-47, July 2021. (pdf)

### Theses

- PhD Thesis: Acquiring and Exploiting Lexical Knowledge for Twitter Sentiment Analysis (pdf), (examiner’s report).
- Master’s Thesis (first four pages in Spanish): Static and Dynamic Analysis of Opinions in Twitter (pdf).
- Undergraduate Thesis (in Spanish): Diseño e Implementación de un Metabusador de Párrafos para la Recuperación de Documentos Similares en la Web (pdf).

### Students

#### Postgraduate

- [2021 - ongoing] David Rojas, Masters in Computer Science, University of Chile.
- [2021 - ongoing] Humberto Rodrigues, Masters in Computer Science, University of Chile.
- [2021 - ongoing] José Cañete, Masters in Computer Science, University of Chile.
- [2021 - ongoing] Gabriel Iturra, Masters in Computer Science, University of Chile.
- [2021 - ongoing] Mauricio Araneda, Co-supervised with Denis Parra, Masters in Computer Science, University of Chile.

- [2021 - ongoing] Bastián Matamala, Co-supervised with Andrés Abeliuk, Masters in Computer Science, University of Chile.
- [2021 - ongoing] Jorge Ortiz, Masters in Computer Science, University of Chile.
- [2020 - ongoing] Hernán Sarmiento, Co-supervised with Bárbara Poblete, PhD, University of Chile.
- [2020 - ongoing] Matías Rojas, Co-supervised with Jocelyn Dunstan, Masters in Computer Science, University of Chile.
- [2019 - ongoing] Frank Zamora, PhD, University of Chile.
- [2020 - ongoing] Javier Muñoz, Masters in Computer Science, University of Chile.
- [2019-2020] Pablo Badilla, Co-supervised with Jorge Pérez, Masters in Computer Science, University of Chile.
- [2019-ongoing] Juglar Díaz, Co-supervised with Bárbara Poblete, PhD, University of Chile.
- [2019-ongoing] Jhonny Cerezo, Co-supervised with Alexandre Bergel, Masters, University of Chile.
- [2019] Arun Khanchandani, Co-supervised with Bernhard Pharinger, Masters in Computer Science, University of Waikato.
- [2019-2020] Alan Ansell, Co-supervised with Bernhard Pharinger, Masters in Computer Science, University of Waikato.

### Undergraduate

- [2021 - ongoing] María José Zambrano, Co-supervised with Pablo Badilla, Computer Science Engineering, University of Chile.
- [2021 - ongoing] Ignacio Meza, Co-supervised with Amanda Williamson, Electrical Engineering, University of Chile.
- [2019-2020] Cristián Tamblay, Computer Science Engineering, University of Chile.
- [2019] David Trye, Co-supervised with Andreea Calude, “Māori Borrowings in Science Digital Media”, Summer Research Scholarship, University of Waikato.
- [2018] Nicole Chan, Co-supervised with Andreea Calude, “Social Media Meets Te Reo Māori Loanwords”, Honours Project, University of Waikato.
- [2018] Joshua Lovelock, Co-supervised with Eibe Frank, “Automatic Detection of Hate Speech”, Honours Project, University of Waikato.

- [2018] Tristan Anderson, Co-supervised with Bernhard Pfahringer, “Building Time-Evolving Opinion Lexicons”, Honours Project, University of Waikato.
- [2012-2013] Edison Marrese Taylor, Co-supervised with Juan Velásquez, “Diseño e Implementación de una Aplicación de Web Opinion Mining para Identificar Preferencias de Usuarios sobre Productos Turísticos de la X Región de los Lagos”, Industrial Engineering, U. of Chile.
- [2012] Luis Maldonado, Co-advisor with Mauricio Marín, “Análisis de Sentimiento en el Sistema de Red Social Twitter”, Execution Informatics Engineering, U. of Santiago.

## Short Courses

- Forecasting, a short course taught by Bruce E. Hansen at Central Bank of Chile, October 29-31, 2013.
- MLSS 2015, Machine Learning Summer School, February 16-25, 2015, Sydney, Australia.

## Academic Visits

- [July 2018] Institute of Computational Linguistics, University of Zurich, hosted by Martin Volk.
- [September 2017] Institute of Computational Linguistics, University of Zurich, hosted by Manfred Klenner.
- [October 2016] National Research Council Canada (NRC), hosted by Saif Mohammad.

## Seminars and Talks

- [January 2022] First Friday Meeting at Facebook (Meta) Research. Will we ever understand Facebook’s influence on elections? A scientists’ perspective.
- [December 2021] AI Lab at PUC. Tackling Fairness, Change and Polysemy in Word Embeddings.
- [August 2021] FCFM- Iniciativa de Datos e Inteligencia Artificial (D&IA), Análisis de emociones y sentimientos en medios de comunicación social.
- [August 2021] Enaex Robotics, Introduction to Machine Learning
- [October 2020] WOPATEC 2020 - CILCC-2020, Invited talk: Sesgo en Word Embeddings (acta congreso)

- [January 2020] Universidad Adolfo Ibañez, Seminario: Sistematizando la participación ciudadana. Análisis de emociones y sentimientos en medios de comunicación social.
- [July 2019] AI Lab at PUC. Sentiment Analysis and NLP. Hosted by Álvaro Soto.
- [June 2019] AMW Data Science School 2019. Tutorial: Deep Learning for Natural Language Processing.
- [November 2018] Asia-Pacific iSchools Regional Meeting 2018 19 November 2018, Hamilton, New Zealand: Emotion Intensties of Tweets.
- [March 2018] Natural Language Processing in NZ Meetup. Tutorial: Using Sentiment Analysis as a Case Study for Introducing Modern NLP Concepts.
- [February 2018] University of Waikato. Tutorial: Using Sentiment Analysis as a Case Study for Introducing Modern NLP Concepts.
- [January 2018] Universidad de Chile. Tutorial: Using Sentiment Analysis as a Case Study for Introducing Modern NLP Concepts.
- [January 2018] Pontifica Universidad Catolica de Chile. Invited talk at CIWS Workshop - Future of Data: Emotion Intensties of Tweets.
- [September 2017] Institute of Computational Linguistics, University of Zurich: Acquiring and Exploiting Lexical Knowledge for Twitter Sentiment Analysis.
- [October 2016] National Research Council Canada (NRC): Acquiring and Exploiting Lexical Knowledge for Twitter Sentiment Analysis.
- [September 2016] University of Melbourne, hosted by Timothy Baldwin: Acquiring and Exploiting Lexical Knowledge for Twitter Sentiment Analysis.
- [July 2016] Pontifica Universidad Catolica de Chile: Acquiring and Exploiting Lexical Knowledge for Twitter Sentiment Analysis.
- [July 2016] Universidad de Chile: Acquiring and Exploiting Lexical Knowledge for Twitter Sentiment Analysis.
- [June 2016] Universidad Tecnica Federico Santa Maria: Acquiring and Exploiting Lexical Knowledge for Twitter Sentiment Analysis.

## Software

- Contributor to the WEFÉ: The Word Embeddings Fairness Evaluation Framework.
- Main developer of AffectiveTweets, a Weka package for analysing emotion and sentiment of tweets.

- Contributor to the NLP modules of the WekaDeepLearning4j package.
- Some code for building sentiment lexicons from tweets is here (the core of this code has been integrated into AffectiveTweets).

## Shared Task Organisation

- Co-organizer of the LChange'22 Semantic Change Detection in Spanish Task.
- Co-organizer of the SemEval-2018 Task 1: Affect in Tweets.
- Co-organizer of WASSA-2017 Emotion Intensity Detection Task.

## Media Outreach

- Beauchef Magazine 2021: Inteligencia artificial para el apoyo de la educación diferencial
- Investigadores del DCC participan en nuevo Centro de Inteligencia Artificial (CenIA)
- DCC realizó tradicional ceremonia de reconocimiento a estudiantes y profesores destacados
- Nano Break - Capítulo 5 - Sesgo algorítmico en IA: qué es y cómo combatirlo.
- Les Doctores Salvajes - Entrevista a Felipe Bravo
- IMFD - IA y clasificación de contenidos: el desafío en el que trabajan el Poder Judicial y el IMFD
- IMFD - Modelos de análisis de lenguaje que evolucionen en el tiempo: el proyecto de Felipe Bravo que se adjudicó un Fondecyt de Iniciación
- FCFM Uchile - Ocho investigaciones patrocinadas por la FCFM son beneficiadas con Fondecyt de Iniciación
- Sesgo Algorítmico: a video about our research on bias in word embeddings
- Word Embedding Fairness Evaluation - an invited blog post about WEFE published in KDnuggets
- FCFM Uchile - Investigadores DCC publican trabajo que aborda problema de sesgo algorítmico
- FCFM Uchile - Prof. Felipe Bravo publica investigaciones sobre dos desarrollos de software de código abierto
- DCC Uchile - DCC integra a dos nuevos académicos de jornada completa
- University of Waikato - When machine learning, Twitter and te reo Māori merge

- RadioNZ - NZ's unique te reo tweets

## **Technical Skills**

- Programming Languages: Java, R, Python, C,C++.
- Database Systems: PostgreSQL, MySQL, MongoDB.

## **Languages**

- Spanish: Native.
- English: Fluent, TOEFL IBT 103/120.
- German: Average, Sprachdiplom Zweite Stufe.

## **References**

- Bernhard Pfahringer: Full Professor, University of Waikato.
- Eibe Frank: Full Professor, University of Waikato.
- Saif M. Mohammad: Senior Research Scientist, National Research Council Canada (NRC).

Felipe José Bravo Márquez

Santiago, Chile November 24, 2021