Curriculum Vitae

Felipe José Bravo Márquez

Personal Information

Nationality: Chile.
Date of Birth: 3rd of January 1984.
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Areas of Interest: Data Mining, Machine Learning, Information Retrieval, Natural Language Processing, Social Media Analysis.

Education

2014-2017	PhD in Computer Science, The University of Waikato, New Zealand.
2011-2013	M.Sc. in Computer Science, University of Chile (summa cum laude).
2010	Professional Degree in Industrial Engineering, University of Chile (summa cum laude).
2010	Professional Degree in Computer Science Engineering, University of Chile (summa cum laude).
2005-2009	Bachelor of Science in Industrial Engineering, University of Chile.
2003-2008	Bachelor in Computer Science, University of Chile.

Work Experience

2019 - present	Assistant Professor, *Department of Computer Science, University of Chile.*
2017- 2019	Research Fellow, *Machine Learning Group, University of Waikato.*

2011-2013	Research Engineer, *Yahoo! Labs Latin America*. `http://labs.yahoo.com/Yahoo_Labs_Santiago`
2009- 2011	Researcher and Software Developer, *Web Intelligence Consortium Chile Research Centre*. `http://wi.dii.uchile.cl`
2009	Internship, *Simple*, Software Developer. `http://www.simple.cl`.
2009	Internship, *Previred*, Business Process Management Area. `http://www.previred.com`.
2005-2006	Internship, *Vitanet*, Software Developer. `http://www.vitanet.cl`.

Scholarships

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. 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.

2. F. Bravo-Marquez, E. Frank, and B. Pfahringer *Building a Twitter Opinion Lexicon from Automatically-annotated Tweets*, In *Knowledge-Based Systems* Volume 108, September 2016, Pages 65–78.

3. 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.

4. 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.

5. 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.

Conference and Workshop Papers

1. 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.

2. 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.

3. 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.

4. 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.

5. F. Bravo-Marquez, E. Frank, and B. Pfahringer *Annotate-Sample-Average (ASA): A New Distant Supervision Approach for Twitter Sentiment Analysis*, In *The biennial European Conference on Artificial Intelligence (ECAI'16)*. The Hague, Netherlands.

6. F. Bravo-Marquez, E. Frank, and B. Pfahringer *From opinion lexicons to sentiment classification of tweets and vice versa: a transfer learning approach*, In *The IEEE/WIC/ACM International Conference on Web Intelligence (WI'16)*. Omaha, Nebraska, USA.

7. F. Bravo-Marquez, E. Frank, S. Mohammad, and B. Pfahringer *Determining Word–Emotion Associations from Tweets by Multi-Label Classification*, In *The IEEE/WIC/ACM International Conference on Web Intelligence (WI'16)*. Omaha, Nebraska, USA.

8. 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.

9. 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.

10. 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.

11. 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.

12. 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.

13. 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.

14. 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).

15. 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.

16. 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.

17. 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.

18. 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.

19. 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.

Teaching Experience

Spring 2018	(Lecturer) Practical Data Mining (COMP321), The University of Waikato
June 2018	(Lecturer) Deep Learning for Natural Language Processing, IfI Summer School 2018 on Machine Learning, Deparment of Informatics, University of Zurich.
Spring 2017	(Tutor) Practical Data Mining (COMP321), The University of Waikato.
Spring 2013	(Lecturer) Databases Management Diploma, Informatic Engineering Department (postgraduate), Universidad Técnica Federico Santa María.
Spring 2012	(Lecturer) Data Mining (CC5206/CC71Q), Computer Science Department (undergraduate and postgraduate), University of Chile.
Fall 2011	(Lecturer) Information Technologies and Business Process Redesign (IN72K), Master in Operations Management, University of Chile.
Spring 2010	(TA) Web Mining (IN4522), Industrial Engineering, University of Chile.
Spring 2010	(TA) ICT for globalization (IN7B0), Master in Management for Globalization, University of Chile.

Student Supervision

- (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 Lexicon", Honours Project, University of Waikato.

- (2013) Edison Marrese Taylor, Co-supervisor 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-supervisor with Mauricio Marín, "Análisis de Sentimiento en el Sistema de Red Social Twitter", Execution Informatic Engineering, U. of Santiago.

Professional Community Involvement

- Co-organiser of the SemEval-2018 Task 1: Affect in Tweets.

- Co-organiser of the WASSA-2017 shared task on emotion intensity (EmoInt).

- Program committees: WASSA 2018, WISDOM 2018, SEM-EVAL 2018, IJCAI-ECAI 2018, EMNLP 2017, WASSA 2017.

- Journal Reviewer: 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.

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.

Invited Talks

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 Técnica Federico Santa María: Acquiring and Exploiting Lexical Knowledge for Twitter Sentiment Analysis.

SHORT COURSES

- Forecasting, taught by Bruce E. Hansen at Central Bank of Chile, October 29-31, 2013. `http://www.ssc.wisc.edu/~bhansen/cbc/`.

- Machine Learning Summer School, February 16-25, 2015, Sydney, Australia. `http://rp-www.cs.usyd.edu.au/~mlss/`.

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 Mohammad
Senior Research Officer, National Research Council Canada (NRC).

Felipe José Bravo Márquez
Santiago, Chile March 6, 2019