Alberto Poncelas Rodriguez

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Work Experience

2015 – Present

- Researcher in ADAPT centre, Ireland.
 - I am a PhD Researcher at the ADAPT Centre, which is the Science Foundation Ireland funded research centre for Digital Content Technology. My research is in the area of Data selection in Machine Translation.
- 2013 2015
- Big Data Engineer in BEEVA.

Projects involved: (i) Development of a tool for calculating the risks involved in the granting of loans; (ii) A client segmentation analysis using data mining techniques. Technologies: R and Hive; and (iii) Development of a tool based in intelligent agent ecosystem. Technologies: node.js and Neo4j.

- 2012 2012
- Software Developer in LKS.
 Use of Oracle PL/SQL, Oracle Forms and Oracle Reports technologies
- 2011 2011
- Web Developer in Sectoro4 Consultoría Y Soluciones Informáticas S.L. Web application development using the following technologies: PHP (CodeIgniter framework), HTML, ¡Query, AJAX, CSS, MySQL

Education

• Ph.D., Machine Translation in Dublin City University, Ireland.

Research in the area of Machine Translation.

Thesis title: Improving Transductive Data Selection Algorithms for Machine Translation

- 2012 2013
- M.Sc., Machine Learning in University of the Basque Country, Spain.

Thesis title: Preprocess and data analysis techniques for affymetrix DNA microarrays using bioconductor: a case study in Alzheimer disease

- 2009 2010
- Erasmus study year in École pour l'informatique et les techniques avancées (EPITA), France
- 2004 2011
- **B.Sc. Computer Science** in University of the Basque Country, Spain. Creation of multiple modules for integration and communication between two JAVA applications.

Certificates and Courses

- Machine learning Coursera
 - https://www.coursera.org/account/accomplishments/certificate/5XKFZ85CN8U8
- Data Science Specialization Coursera https://www.coursera.org/account/accomplishments/specialization/3QEOAonkEe

Teaching Experience

- **Teaching Assistant** in Dublin City University.
 Statistical Machine Translation: teaching, coding/evaluation of lab exercises and grading.
- Teaching Assistant in University of the Basque Country.

 Data Structures and Algorithms: teaching, coding/evaluation of lab exercises and grading.
- **Teaching Assistant** in University of the Basque Country.

 Programming I: teaching, coding/evaluation of lab exercises and grading.

Research Publications

- Poncelas, A., de Buy Wenniger, G. M., & Way, A. (2019a). Adaptation of machine translation models with back-translated data using transductive data selection methods. In *20th international conference on computational linguistics and intelligent text processing*. La Rochelle, France.
- 2 **Poncelas**, **A.**, de Buy Wenniger, G. M., & Way, A. (2019b). Transductive data-selection algorithms for fine-tuning neural machine translation. In *Proceedings of the 8th workshop on patent and scientific literature translation* (pp. 13–23). Dublin, Ireland.
- Poncelas, A., Popovic, M., Shterionov, D., de Buy Wenniger, G. M., & Way, A. (2019). Combining SMT and NMT back-translated data for efficient NMT. In *Proceedings of recent advances in natural language processing (RANLP)* (pp. 922–931). Varna, Bulgaria.
- 4 Poncelas, A., Sarasola, K., Dowling, M., Way, A., Labaka, G., & Alegria, I. (2019). Adapting NMT to caption translation in Wikimedia Commons for low-resource languages. *Procesamiento del Lenguaje Natural*, 63, 33–40.
- Poncelas, A. & Way, A. (2019). Selecting Artificially-Generated Sentences for Fine-Tuning Neural Machine Translation. In Proceedings of the 12th international conference on natural language generation. Tokyo, Japan.
- 6 Vanmassenhove, E., Moryossef, A., Poncelas, A., Way, A., & Shterionov, D. (2019). ABI Neural Ensemble Model for Gender Prediction Adapt Bar-Ilan Submission for the CLIN29 Shared Task on Gender Prediction. In *Computational linguistics of the netherlands clin29*. Groningen, The Netherlands.
- Dowling, M., Lynn, T., **Poncelas**, **A.**, & Way, A. (2018). SMT versus NMT: Preliminary comparisons for Irish. In *Technologies for mt of low resource languages (loresmt 2018)* (pp. 12–20). Boston, USA.
- 8 **Poncelas**, **A.**, de Buy Wenniger, G. M., & Way, A. (2018). Data selection with feature decay algorithms using an approximated target side. In 15th international workshop on spoken language translation (iwslt 2018) (pp. 173–180). Bruges, Belgium.
- Poncelas, A., Maillette de Buy Wenniger, G., & Way, A. (2018). Feature decay algorithms for neural machine translation. In Proceedings of the 21st annual conference of the european association for machine translation (pp. 239–248). Alacant, Spain.
- 10 **Poncelas**, **A.**, Shterionov, D., Way, A., de Buy Wenniger, G. M., & Passban, P. (2018). Investigating backtranslation in neural machine translation. In *21st annual conference of the european association for machine translation* (pp. 249–258). Alacant, Spain.

- 11 Poncelas, A., Way, A., & Sarasola, K. (2018). The ADAPT System Description for the IWSLT 2018 Basque to English Translation Task. In *International workshop on spoken language translation* (pp. 72–82). Bruges, Belgium.
- 12 Silva, C. C., Liu, C.-H., **Poncelas**, **A.**, & Way, A. (2018). Extracting in-domain training corpora for neural machine translation using data selection methods. In *Proceedings of the third conference on machine translation: research papers* (pp. 224–231).
- 13 Dzendzik, D., **Poncelas, A.**, Vogel, C., & Liu, Q. (2017). ADAPT centre cone team at IJCNLP-2017 task 5: a similarity-based logistic regression approach to multi-choice question answering in an examinations shared task. In *Proceedings of the ijcnlp 2017, shared tasks* (pp. 67–72). Taipei, Taiwan.
- 14 Liu, C.-H., Groves, D., Hayakawa, A., **Poncelas, A.**, & Liu, Q. (2017). Understanding meanings in multilingual customer feedback. In *Proceedings of first workshop on social media and user generated content machine translation (Social MT 2017)*. Prague, Czech Republic.
- 15 Liu, C.-H., Moriya, Y., **Poncelas**, **A.**, & Groves, D. (2017). IJCNLP-2017 Task 4: Customer Feedback Analysis. In *Proceedings of the IJCNLP 2017, shared tasks* (pp. 26–33). Taipei, Taiwan.
- 16 **Poncelas**, **A.**, Maillette de Buy Wenniger, G., & Way, A. (2017). Applying n-gram alignment entropy to improve feature decay algorithms. *The Prague Bulletin of Mathematical Linguistics*, 108(1), 245–256.
- 17 **Poncelas**, **A.**, Way, A., & Toral, A. (2016). Extending feature decay algorithms using alignment entropy. In *International workshop on future and emerging trends in language technology* (pp. 170–182). Springer. Seville, Spain.
- 18 **Poncelas**, **A.** (2013). Preprocess and data analysis techniques for affymetrix dna microarrays using bioconductor: a case study in alzheimer disease (Master's thesis, University of the Basque Country).

Miscellaneous

Professional services

- MTSummit 2019 PC member / Proceedings chair
 - LoResMT (MTSummit 2019) PC member / Reviewer
 - RANLP 2019 PC member / Reviewer
 - Language Resources and Evaluation (LREV) Reviewer
- 2018 LoResMT (AMTA 2018) Reviewer
- Cupral Workshop (IJCNLP 2017) Co-organizer / Reviewer
 - Customer Feedback Analysis Shared Task (IJCNLP 2017) Co-organizer / Reviewer
- DL4MT Winter School: Deep Learning for Machine Translation volunteer

Grants and Awards

- President's Awards for Engagement (nominated).
- School of computing travel grant
- Science Foundation Ireland (SFI). PhD funded by SFI through the ADAPT Centre.

Scientific outreach

- 2017 2018 My Thesis in 3 in French
- 2016 2019 Research Day

Miscellaneous (continued)

Volunteering Experience

• Coordinator All Ireland Linguistics Olympiad (AILO) and International Linguistics Olympiad (2017)

2018 • Spanish Teacher

• Intercultural Ambassador.

Languages

• Native: Spanish

• Proficiency level: English

• Medium level: French, Basque

• Beginner level: Serbian, German, Japanese