Alberto Poncelas Rodriguez

🌐 https://alberto-poncelas.github.io
🔗 https://ie.linkedin.com/in/albertoponcelas/en

Work Experience

Oct 2015 – Present	• **Machine Translation Researcher** in ADAPT centre, Ireland. My research is in the area of Machine Translation and Natural Language Processing (pre-process data for seq2seq models, analysis of synthetic data, build sentiment classifier with Keras ...).
Aug 2013 – Sep 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.
Jun 2012 – Jul 2012	• **Software Developer** in LKS. Use of Oracle PL/SQL, Oracle Forms and Oracle Reports technologies
May 2011 – Aug 2011	• **Web Developer** in Sector04 Consultoría Y Soluciones Informáticas S.L. Web application development using the following technologies: PHP (Code-Igniter framework), HTML, jQuery, AJAX, CSS, MySQL

Education

2015 – 2019	• **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.

Certificates and Courses

2016	• **Machine learning** Coursera https://www.coursera.org/account/accomplishments/certificate/5XKFZ85CN8U8
2014	• **Data Science Specialization** Coursera https://www.coursera.org/account/accomplishments/specialization/3QEOAonkEe

Teaching Experience

2020
- **Teaching** in Dublin City University.
  Machine Learning
- **Teaching** in Trinity College Dublin.
  Interlingual Technologies: Machine Translation lecture.

2019
- **Teaching Assistant** in Dublin City University.
  Statistical Machine Translation: teaching, coding/evaluation of lab exercises and grading.

2006
- **Teaching Assistant** in University of the Basque Country.
  Data Structures and Algorithms: teaching, coding/evaluation of lab exercises and grading.

2005–2008
- **Teaching Assistant** in University of the Basque Country.
  Programming I: teaching, coding/evaluation of lab exercises and grading.

Research Publications

1   **Poncelas, A.** (2019). *Improving transductive data selection algorithms for machine translation* (Doctoral dissertation, Dublin City University).

2   **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.

3   **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.

4   **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.

5   **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.

6   **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* (pp. 219–228). Tokyo, Japan.

7   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.

8   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.

9   **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.

10 **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). Alicante, Spain.

11 **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). Alicante, Spain.

12 **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.

13 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). Brussels, Belgium.

14 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.

15 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.

16 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.

17 **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.

18 **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.

19 **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

2020	• **ACL 2020** Reviewer
2019	• **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
2017	• **Cupral Workshop (IJCNLP 2017)** Co-organizer / Reviewer
	• **Customer Feedback Analysis Shared Task (IJCNLP 2017)** Co-organizer / Reviewer
2015	• **DL4MT Winter School: Deep Learning for Machine Translation** volunteer

Grants and Awards

2018	• President's Awards for Engagement (nominated).

Miscellaneous (continued)

2017	• School of computing travel grant
2015 – 2019	• 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**

Volunteering Experience

2017 – 2019	• **Coordinator** All Ireland Linguistics Olympiad (AILO) and International Linguistics Olympiad (2017)
2018	• **Spanish Teacher**
2016	• **Intercultural Ambassador.**

Languages

- Native: Spanish
- Proficiency level: English
- Intermediate level: French, Basque
- Basic level: Serbian, German, Japanese