# Alberto Poncelas Rodriguez

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



## Work Experience

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|---|---|
| Oct 2019 – Present | • **Postdoctoral Researcher** in ADAPT Centre, Ireland.<br>Research is in the area of Machine Translation and Natural Language Processing. Investigation of indirect translation and sentiment classification (using Keras). |
| Oct 2015 – Sep 2019 | • **PhD Researcher** in ADAPT Centre, Ireland.<br>Research is in the area of Machine Translation and Natural Language Processing. Use of data-selection techniques and synthetic data generation for improving machine-translation. |
| Aug 2013 – Sep 2015 | • **Big Data Engineer** in BEEVA.<br>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.<br>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.<br>Web application development using the following technologies: PHP (CodeIgniter framework), HTML, jQuery, AJAX, CSS, MySQL |

## Education

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| 2015 – 2019 | • **Ph.D., Machine Translation** in Dublin City University, Ireland.<br>Research in the area of Machine Translation.<br>Thesis title: *Improving Transductive Data Selection Algorithms for Machine Translation* |
| 2012 – 2013 | • **M.Sc., Machine Learning** in University of the Basque Country, Spain.<br>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

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| 2016 | • **Machine learning** Coursera<br>https://www.coursera.org/account/accomplishments/certificate/5XKFZ85CN8U8 |

## Certificates and Courses (continued)

2014     • **Data Science Specialization** Coursera
         `https://www.coursera.org/account/accomplishments/specialization/3QEOAonkEe`

## Teaching Experience

2020     • **Teaching** in Dublin City University.
         Machine Learning
         Machine Translation

         • **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).

## Presentations

2020    • **The sentiment classification on indirect translation** (in French) Brest, France

2019    • **Transductive Data-Selection Algorithms for Fine-Tuning Neural Machine Translation** Dublin, Ireland

         • **Combining SMT and NMT Back-Translated Data for Efficient NMT** Varna, Bulgaria

## Presentations (continued)

- **Adaptation of Machine Translation Models with Back-translated Data using Transductive Data Selection Methods** La Rochelle, France

2018    • **Understanding Meanings in Multilingual Customer Feedback** Prage, Czech Republic

2017    • **IJCNLP-2017 task 4: Customer feedback analysis Workshop presentation** Taipei, Taiwan

- **A Similarity-Based Logistic Regression Approach to Multi-choice Question Answering in an Examinations Shared Task** Taipei, Taiwan

2016    • **Extending feature decay algorithms using alignment entropy** Sevilla, Spain


## 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).

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    • **DCU 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