Integration of Machine Translation Paradigms

Marta R. COSTA-JUSSÀ

TALP Research Center, Universitat Politècnica de Catalunya, Barcelona

marta.ruiz@upc.edu

Abstract. Machine Translation (MT) is a highly interdisciplinary and multidisciplinary field since it is approached from the point of view of engineering, computer science, informatics, statistics and linguists. The goal of this research project is to approach the different profiles in the MT community by providing a new integrated MT paradigm which mainly includes linguistic technologies and statistical algorithms.

Description

The proposed new paradigm in this project provides solutions to current MT challenges such as unknown words, reordering and semantic ambiguities. The project focuses on three of the most spoken languages: Chinese, Spanish and English. These language pairs do not only involve many economic and cultural interests, but they also include some of the most relevant MT challenges such as morphological, syntactic and semantic variations. This project is funded under FP7-PEOPLE-2011-299251-IOF MarieCurie International Outgoing Fellowship¹. The project duration is from 2012-12-07 to 2016-07-08. The project coordinator center is Universitat Politècnica de Catalunya (UPC, Barcelona) and the supervisor is Prof. José A. R. Fonollosa. The host institution has been the Institute for Infocomm Research (I2R, Singapore) and the corresponding supervisors were Prof. Haizhou Li and Dr. Rafael E. Banchs. The MarieCurie Researcher is Dr. Marta R. Costa-jussà. See a complete list of the project publications².

References

Costa-jussà, M. R. How much Hybridization does MT Need? Journal of the Association for Information Science and Technology, 6(10), 2015

Costa-jussà, M. R. and Centelles, J. Description of the Chinese-to-Spanish RBMT System Developed with a Hybrid Combination of Human Annotation and Statistical Techniques. ACM Transactions on Asian and Low-Resource Language Information Processing, 15(1), 2016

Costa-jussà, M. R and Fonollosa, J.A.R. Character-based Neural MT Proc. of ACL, 2016

¹http://www.costa-jussa.com/projects/ongoing/imtrap/

²http://www.costa-jussa.com