1. Record Nr. UNINA9910349303003321

Autore	Cheng Yong
Titolo	Joint Training for Neural Machine Translation / / by Yong Cheng
Pubbl/distr/stampa	Singapore : , : Springer Singapore : , : Imprint : Springer, , 2019
ISBN	981-329-748-4
Edizione	[1st ed. 2019.]
Descrizione fisica	1 online resource (90 pages)
Collana	Springer Theses, Recognizing Outstanding Ph.D. Research, , 2190-5053
Disciplina	418.020285
Soggetti	Natural language processing (Computer science) Artificial intelligence Computer logic Natural Language Processing (NLP) Logic in AI
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	1. Introduction -- 2. Neural Machine Translation -- 3. Agreement-based Joint Training for Bidirectional Attention-based Neural Machine Translation -- 4. Semi-supervised Learning for Neural Machine Translation -- 5. Joint Training for Pivot-based Neural Machine Translation -- 6. Joint Modeling for Bidirectional Neural Machine Translation with Contrastive Learning -- 7. Related Work -- 8. Conclusion.
Sommario/riassunto	This book presents four approaches to jointly training bidirectional neural machine translation (NMT) models. First, in order to improve the accuracy of the attention mechanism, it proposes an agreement-based joint training approach to help the two complementary models agree on word alignment matrices for the same training data. Second, it presents a semi-supervised approach that uses an autoencoder to reconstruct monolingual corpora, so as to incorporate these corpora into neural machine translation. It then introduces a joint training algorithm for pivot-based neural machine translation, which can be used to mitigate the data scarcity problem. Lastly it describes an end-to-end bidirectional NMT model to connect the source-to-target and target-to-source translation models, allowing the interaction of

parameters between these two directional models.