

36th AAI Conference on Artificial Intelligence (AAAI-22)

Volume 10: AAI Technical Tracks

- Speech and Natural Language Processing

Online
22 February – 1 March 2022

Part 1 of 2

ISBN: 978-1-7138-5583-5

Printed from e-media with permission by:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571



Some format issues inherent in the e-media version may also appear in this print version.

Copyright© (2022) by Association for the Advancement of Artificial Intelligence
All rights reserved.

Printed with permission by Curran Associates, Inc. (2022)

For permission requests, please contact Association for the Advancement of Artificial Intelligence
at the address below.

Association for the Advancement of Artificial Intelligence
2275 East Bayshore Road
Suite 160
Palo Alto, California 94303
USA

Phone: 1-650-328-3123
Fax: 1-650-321-4457

<https://aaai.org/Press/press.php>

Additional copies of this publication are available from:

Curran Associates, Inc.
57 Morehouse Lane
Red Hook, NY 12571 USA
Phone: 845-758-0400
Fax: 845-758-2633
Email: curran@proceedings.com
Web: www.proceedings.com

TABLE OF CONTENTS

PART 1

AAAI TECHNICAL TRACK ON SPEECH AND NATURAL LANGUAGE PROCESSING

Pinpointing Fine-Grained Relationships Between Hateful Tweets and Replies.....	10418
<i>Abdullah Albanyan, Eduardo Blanco</i>	
Cross-Modal Coherence for Text-To-Image Retrieval.....	10427
<i>Malihe Alikhani, Fangda Han, Hareesh Ravi, Mubbasir Kapadia, Vladimir Pavlovic, Matthew Stone</i>	
Enhanced Story Comprehension for Large Language Models Through Dynamic Document-Based Knowledge Graphs.....	10436
<i>Berkeley R Andrus, Yeganeh Nasiri, Shilong Cui, Benjamin Cullen, Nancy Fulda</i>	
Diagnostics-Guided Explanation Generation	10445
<i>Pepa Atanasova, Jakob Grue Simonsen, Christina Lioma, Isabelle Augenstein</i>	
Mitigating Reporting Bias in Semi-Supervised Temporal Commonsense Inference with Probabilistic Soft Logic.....	10454
<i>Bibo Cai, Xiao Ding, Bowen Chen, Li Du, Ting Liu</i>	
Adversarial Training for Improving Model Robustness? Look at Both Prediction and Interpretation.....	10463
<i>Hanjie Chen, Yangfeng Ji</i>	
Unsupervised Editing for Counterfactual Stories	10473
<i>Jiangjie Chen, Chun Gan, Sijie Cheng, Hao Zhou, Yanghua Xiao, Lei Li</i>	
LOREN: Logic-Regularized Reasoning for Interpretable Fact Verification	10482
<i>Jiangjie Chen, Qiaoben Bao, Changzhi Sun, Xinbo Zhang, Jiaye Chen, Hao Zhou, Yanghua Xiao, Lei Li</i>	
ContrastNet: A Contrastive Learning Framework for Few-Shot Text Classification.....	10492
<i>Junfan Chen, Richong Zhang, Yongyi Mao, Jie Xu</i>	
From Good to Best: Two-Stage Training for Cross-Lingual Machine Reading Comprehension.....	10501
<i>Nuo Chen, Linjun Shou, Ming Gong, Jian Pei</i>	
Probing Linguistic Information for Logical Inference in Pre-Trained Language Models.....	10509
<i>Zeming Chen, Qiyue Gao</i>	
On the Transferability of Pre-Trained Language Models: A Study from Artificial Datasets.....	10518
<i>Cheng-Han Chiang, Hung-Yi Lee</i>	
C2L: Causally Contrastive Learning for Robust Text Classification	10526
<i>Seungtaek Choi, Myeongho Jeong, Hojae Han, Seung-Won Hwang</i>	
Novelty Controlled Paraphrase Generation with Retrieval Augmented Conditional Prompt Tuning	10535
<i>Jishnu Ray Chowdhury, Yong Zhuang, Shuyi Wang</i>	
Flexible Instance-Specific Rationalization of NLP Models	10545
<i>George Chrysostomou, Nikolaos Aletras</i>	

InfoLM: A New Metric to Evaluate Summarization & Data2Text Generation.....	10554
<i>Pierre Jean A. Colombo, Chloé Clavel, Pablo Piantanida</i>	
Nice Perfume. How Long Did You Marinate in It? Multimodal Sarcasm Explanation	10563
<i>Poorav Desai, Tanmoy Chakraborty, Md Shad Akhtar</i>	
Zero-Shot Commonsense Question Answering with Cloze Translation and Consistency Optimization.....	10572
<i>Zi-Yi Dou, Nanyun Peng</i>	
Synthetic Disinformation Attacks on Automated Fact Verification Systems.....	10581
<i>Yibing Du, Antoine Bosselut, Christopher D. Manning</i>	
Regularizing End-To-End Speech Translation with Triangular Decomposition Agreement	10590
<i>Yichao Du, Zhirui Zhang, Weizhi Wang, Boxing Chen, Jun Xie, Tong Xu</i>	
Play the Shannon Game with Language Models: A Human-Free Approach to Summary Evaluation.....	10599
<i>Nicholas Egan, Oleg Vasilyev, John Bohannon</i>	
Fortunately, Discourse Markers Can Enhance Language Models for Sentiment Analysis	10608
<i>Liat Ein-Dor, Ilya Shnayderman, Artem Spector, Lena Dankin, Ranit Aharonov, Noam Slonim</i>	
Retrieve, Caption, Generate: Visual Grounding for Enhancing Commonsense in Text Generation Models.....	10618
<i>Steven Y. Feng, Kevin Lu, Zhuofu Tao, Malihe Alikhani, Teruko Mitamura, Eduard Hovy, Varun Gangal</i>	
Language Model Priming for Cross-Lingual Event Extraction.....	10627
<i>Steven Fincke, Shantanu Agarwal, Scott Miller, Elizabeth Boschee</i>	
Language Modelling Via Learning to Rank	10636
<i>Arvid Frydenlund, Gagandeep Singh, Frank Rudzicz</i>	
NAREOR: The Narrative Reordering Problem.....	10645
<i>Varun Gangal, Steven Y. Feng, Malihe Alikhani, Teruko Mitamura, Eduard Hovy</i>	
UNISON: Unpaired Cross-Lingual Image Captioning.....	10654
<i>Jiahui Gao, Yi Zhou, Philip L. H. Yu, Shafiq Joty, Jiuxiang Gu</i>	
AutoBERT-Zero: Evolving BERT Backbone from Scratch.....	10663
<i>Jiahui Gao, Hang Xu, Han Shi, Xiaozhe Ren, Philip L. H. Yu, Xiaodan Liang, Xin Jiang, Zhenguo Li</i>	
ISEEQ: Information Seeking Question Generation Using Dynamic Meta-Information Retrieval and Knowledge Graphs.....	10672
<i>Manas Gaur, Kalpa Gunaratna, Vijay Srinivasan, Hongxia Jin</i>	
Explainable Metaphor Identification Inspired by Conceptual Metaphor Theory	10681
<i>Mengshi Ge, Rui Mao, Erik Cambria</i>	
Confidence Calibration for Intent Detection Via Hyperspherical Space and Rebalanced Accuracy- Uncertainty Loss.....	10690
<i>Yantao Gong, Cao Liu, Fan Yang, Xunliang Cai, Guanglu Wan, Jiansong Chen, Weipeng Zhang, Houfeng Wang</i>	
SSAST: Self-Supervised Audio Spectrogram Transformer	10699
<i>Yuan Gong, Cheng-I Lai, Yu-An Chung, James Glass</i>	

Block-Skim: Efficient Question Answering for Transformer.....	10710
<i>Yue Guan, Zhengyi Li, Zhouhan Lin, Yuhao Zhu, Jingwen Leng, Minyi Guo</i>	
Deep Clustering of Text Representations for Supervision-Free Probing of Syntax	10720
<i>Vikram Gupta, Haoyue Shi, Kevin Gimpel, Mrinmaya Sachan</i>	
Few-Shot Cross-Lingual Stance Detection with Sentiment-Based Pre-Training	10729
<i>Momchil Hardalov, Arnav Arora, Preslav Nakov, Isabelle Augenstein</i>	
Attention Biasing and Context Augmentation for Zero-Shot Control of Encoder-Decoder Transformers for Natural Language Generation.....	10738
<i>Devamanyu Hazarika, Mahdi Namazifar, Dilek Hakkani-Tür</i>	
GALAXY: A Generative Pre-Trained Model for Task-Oriented Dialog with Semi-Supervised Learning and Explicit Policy Injection.....	10749
<i>Wanwei He, Yinpei Dai, Yinhe Zheng, Yuchuan Wu, Zheng Cao, Dermot Liu, Peng Jiang, Min Yang, Fei Huang, Luo Si, Jian Sun, Yongbin Li</i>	
Protecting Intellectual Property of Language Generation APIs with Lexical Watermark.....	10758
<i>Xuanli He, Qionгкаi Xu, Lingjuan Lyu, Fangzhao Wu, Chenguang Wang</i>	
BROS: A Pre-Trained Language Model Focusing on Text and Layout for Better Key Information Extraction from Documents.....	10767
<i>Teakgyu Hong, Donghyun Kim, Mingi Ji, Wonseok Hwang, Daehyun Nam, Sungrae Park</i>	
Non-Autoregressive Translation with Layer-Wise Prediction and Deep Supervision	10776
<i>Chenyang Huang, Hao Zhou, Osmar R. Zaiane, Lili Mou, Lei Li</i>	
Word Level Robustness Enhancement: Fight Perturbation with Perturbation	10785
<i>Pei Huang, Yuting Yang, Fuqi Jia, Minghao Liu, Feifei Ma, Jian Zhang</i>	
Predicting Above-Sentence Discourse Structure Using Distant Supervision from Topic Segmentation.....	10794
<i>Patrick Huber, Linzi Xing, Giuseppe Carenini</i>	
Call for Customized Conversation: Customized Conversation Grounding Persona and Knowledge.....	10803
<i>Yoonna Jang, Jungwoo Lim, Yuna Hur, Dongsuk Oh, Suhyune Son, Yeonsoo Lee, Donghoon Shin, Seungryong Kim, Heuseok Lim</i>	
Towards Building ASR Systems for the Next Billion Users	10813
<i>Tahir Javed, Sumanth Doddapaneni, Abhigyan Raman, Kaushal Santosh Bhogale, Gowtham Ramesh, Anoop Kunchukuttan, Pratyush Kumar, Mitesh M. Khapra</i>	
Span-Based Semantic Role Labeling with Argument Pruning and Second-Order Inference.....	10822
<i>Zixia Jia, Zhaohui Yan, Haoyi Wu, Kewei Tu</i>	
Incorporating Constituent Syntax for Coreference Resolution.....	10831
<i>Fan Jiang, Trevor Cohn</i>	
XLMM-K: Improving Cross-Lingual Language Model Pre-Training with Multilingual Knowledge.....	10840
<i>Xiaoze Jiang, Yaobo Liang, Weizhu Chen, Nan Duan</i>	
Hierarchical Context Tagging for Utterance Rewriting.....	10849
<i>Lisa Jin, Linfeng Song, Lifeng Jin, Dong Yu, Daniel Gildea</i>	
Search and Learn: Improving Semantic Coverage for Data-To-Text Generation	10858
<i>Shailza Jolly, Zi Xuan Zhang, Andreas Dengel, Lili Mou</i>	

Braid: Weaving Symbolic and Neural Knowledge into Coherent Logical Explanations	10867
<i>Aditya Kalyanpur, Tom Breloff, David A Ferrucci</i>	
Self-Supervised Audio-And-Text Pre-Training with Extremely Low-Resource Parallel Data	10875
<i>Yu Kang, Tianqiao Liu, Hang Li, Yang Hao, Wenbiao Ding</i>	
Bridging the Gap: Using Deep Acoustic Representations to Learn Grounded Language from Percepts and Raw Speech.....	10884
<i>Gaoussou Youssouf Kebe, Luke E. Richards, Edward Raff, Francis Ferraro, Cynthia Matuszek</i>	
ALP: Data Augmentation Using Lexicalized PCFGs for Few-Shot Text Classification	10894
<i>Hazel H. Kim, Daechool Woo, Seong Joon Oh, Jeong-Won Cha, Yo-Sub Han</i>	
CAISE: Conversational Agent for Image Search and Editing.....	10903
<i>Hyounghun Kim, Doo Soon Kim, Seunghyun Yoon, Franck Dernoncourt, Trung Bui, Mohit Bansal</i>	
Dual Task Framework for Improving Persona-Grounded Dialogue Dataset.....	10912
<i>Minju Kim, Beong-Woo Kwak, Youngwook Kim, Hong-In Lee, Seung-Won Hwang, Jinyoung Yeo</i>	
Minimally-Supervised Joint Learning of Event Volitionality and Subject Animacy Classification	10921
<i>Hirokazu Kiyomaru, Sadao Kurohashi</i>	
From Fully Trained to Fully Random Embeddings: Improving Neural Machine Translation with Compact Word Embedding Tables.....	10930
<i>Krtin Kumar, Peyman Passban, Mehdi Rezagholizadeh, Yiusing Lau, Qun Liu</i>	
SGD-X: A Benchmark for Robust Generalization in Schema-Guided Dialogue Systems	10938
<i>Harrison Lee, Raghav Gupta, Abhinav Rastogi, Yuan Cao, Bin Zhang, Yonghui Wu</i>	
Unifying Model Explainability and Robustness for Joint Text Classification and Rationale Extraction	10947
<i>Dongfang Li, Baotian Hu, Qingcai Chen, Tujie Xu, Jingcong Tao, Yunan Zhang</i>	
Text Revision by On-The-Fly Representation Optimization.....	10956
<i>Jingjing Li, Zichao Li, Tao Ge, Irwin King, Michael R. Lyu</i>	
Unified Named Entity Recognition as Word-Word Relation Classification	10965
<i>Jingye Li, Hao Fei, Jiang Liu, Shengqiong Wu, Meishan Zhang, Chong Teng, Donghong Ji, Fei Li</i>	
Sequence-To-Action: Grammatical Error Correction with Action Guided Sequence Generation	10974
<i>Jiquan Li, Junliang Guo, Yongxin Zhu, Xin Sheng, Deqiang Jiang, Bo Ren, Linli Xu</i>	
Dynamic Key-Value Memory Enhanced Multi-Step Graph Reasoning for Knowledge-Based Visual Question Answering	10983
<i>Mingxiao Li, Marie-Francine Moens</i>	
Knowledge Bridging for Empathetic Dialogue Generation.....	10993
<i>Qintong Li, Piji Li, Zhaochun Ren, Pengjie Ren, Zhumin Chen</i>	
Contrast and Generation Make BART a Good Dialogue Emotion Recognizer.....	11002
<i>Shimin Li, Hang Yan, Xipeng Qiu</i>	

A Semi-Supervised Learning Approach with Two Teachers to Improve Breakdown Identification in Dialogues.....	11011
<i>Qian Lin, Hwee Tou Ng</i>	
DiffSinger: Singing Voice Synthesis Via Shallow Diffusion Mechanism	11020
<i>Jinglin Liu, Chengxi Li, Yi Ren, Feiyang Chen, Zhou Zhao</i>	
KGR4: Retrieval, Retrospect, Refine and Rethink for Commonsense Generation	11029
<i>Xin Liu, Dayiheng Liu, Baosong Yang, Haibo Zhang, Junwei Ding, Wenqing Yao, Weihua Luo, Haiying Zhang, Jinsong Su</i>	
Improving Biomedical Information Retrieval with Neural Retrievers	11038
<i>Man Luo, Arindam Mitra, Tejas Gokhale, Chitta Baral</i>	
The King is Naked: On the Notion of Robustness for Natural Language Processing	11047
<i>Emanuele La Malfa, Marta Kwiatkowska</i>	
Selecting Optimal Context Sentences for Event-Event Relation Extraction	11058
<i>Hieu Man, Nghia Trung Ngo, Linh Ngo Van, Thien Huu Nguyen</i>	
Semantic Parsing in Task-Oriented Dialog with Recursive Insertion-Based Encoder	11067
<i>Elman Mansimov, Yi Zhang</i>	
CINS: Comprehensive Instruction for Few-Shot Learning in Task-Oriented Dialog Systems	11076
<i>Fei Mi, Yasheng Wang, Yitong Li</i>	
Semantic Self-Segmentation for Abstractive Summarization of Long Documents in Low-Resource Regimes.....	11085
<i>Gianluca Moro, Luca Ragazzi</i>	
Eye of the Beholder: Improved Relation Generalization for Text-Based Reinforcement Learning Agents.....	11094
<i>Keerthiram Murugesan, Subhajit Chaudhury, Kartik Talamadupula</i>	

PART 2

Improving Neural Cross-Lingual Abstractive Summarization Via Employing Optimal Transport Distance for Knowledge Distillation	11103
<i>Thong Thanh Nguyen, Anh Tuan Luu</i>	
HiTKG: Towards Goal-Oriented Conversations Via Multi-Hierarchy Learning	11112
<i>Jinjie Ni, Vlad Pandealea, Tom Young, Haicang Zhou, Erik Cambria</i>	
Is Discourse Role Important for Emotion Recognition in Conversation?	11121
<i>Donovan Ong, Jian Su, Bin Chen, Anh Tuan Luu, Ashok Narendranath, Yue Li, Shuqi Sun, Yingzhan Lin, Haifeng Wang</i>	
Improved Text Classification Via Contrastive Adversarial Training	11130
<i>Lin Pan, Chung-Wei Hang, Avirup Sil, Saloni Potdar</i>	
LeSICiN: A Heterogeneous Graph-Based Approach for Automatic Legal Statute Identification from Indian Legal Documents.....	11139
<i>Shounak Paul, Pawan Goyal, Saptarshi Ghosh</i>	
Transformer Uncertainty Estimation with Hierarchical Stochastic Attention	11147
<i>Jiahuan Pei, Cheng Wang, György Szarvas</i>	

STEPS: Semantic Typing of Event Processes with a Sequence-To-Sequence Approach	11156
<i>Sveva Pepe, Edoardo Barba, Rexhina Blloshmi, Roberto Navigli</i>	
Sparse Structure Learning Via Graph Neural Networks for Inductive Document Classification.....	11165
<i>Yinhua Piao, Sangseon Lee, Dohoon Lee, Sun Kim</i>	
STEM: Unsupervised STructural EMBedding for Stance Detection	11174
<i>Ron Korenblum Pick, Vladyslav Kozhukhov, Dan Vilenchik, Oren Tsur</i>	
ValueNet: A New Dataset for Human Value Driven Dialogue System	11183
<i>Liang Qiu, Yizhou Zhao, Jinchao Li, Pan Lu, Baolin Peng, Jianfeng Gao, Song-Chun Zhu</i>	
Post-OCR Document Correction with Large Ensembles of Character Sequence-To-Sequence Models.....	11192
<i>Juan Antonio Ramirez-Orta, Eduardo Xamena, Ana Maguitman, Evangelos Milios, Axel J. Soto</i>	
MuMuQA: Multimedia Multi-Hop News Question Answering Via Cross-Media Knowledge Extraction and Grounding	11200
<i>Revant Gangi Reddy, Xilin Rui, Manling Li, Xudong Lin, Haoyang Wen, Jaemin Cho, Lifu Huang, Mohit Bansal, Avirup Sil, Shih-Fu Chang, Alexander Schwing, Heng Ji</i>	
Pushing the Limits of Rule Reasoning in Transformers Through Natural Language Satisfiability	11209
<i>Kyle Richardson, Ashish Sabharwal</i>	
SFSRNet: Super-Resolution for Single-Channel Audio Source Separation.....	11220
<i>Joel Rixen, Matthias Renz</i>	
CEM: Commonsense-Aware Empathetic Response Generation.....	11229
<i>Sahand Sabour, Chujie Zheng, Minlie Huang</i>	
Weakly Supervised Neuro-Symbolic Module Networks for Numerical Reasoning Over Text	11238
<i>Amrita Saha, Shafiq Joty, Steven C. H. Hoi</i>	
Are Vision-Language Transformers Learning Multimodal Representations? a Probing Perspective	11248
<i>Emmanuelle Salin, Badreddine Farah, Stéphane Ayache, Benoit Favre</i>	
Entailment Relation Aware Paraphrase Generation	11258
<i>Abhilasha Sancheti, Balaji Vasan Srinivasan, Rachel Rudinger</i>	
Visual Definition Modeling: Challenging Vision & Language Models to Define Words and Objects.....	11267
<i>Bianca Scarlini, Tommaso Pasini, Roberto Navigli</i>	
Active Learning on Pre-Trained Language Model with Task-Independent Triplet Loss	11276
<i>Seungmin Seo, Donghyun Kim, Youbin Ahn, Kyong-Ho Lee</i>	
OneRel: Joint Entity and Relation Extraction with One Module in One Step.....	11285
<i>Yu-Ming Shang, Heyan Huang, Xianling Mao</i>	
KATG: Keyword-Bias-Aware Adversarial Text Generation for Text Classification.....	11294
<i>Lingfeng Shen, Shoushan Li, Ying Chen</i>	
Unsupervised Deep Keyphrase Generation	11303
<i>Xianjie Shen, Yinghan Wang, Rui Meng, Jingbo Shang</i>	

Generation-Focused Table-Based Intermediate Pre-Training for Free-Form Question Answering	11312
<i>Peng Shi, Patrick Ng, Feng Nan, Henghui Zhu, Jun Wang, Jiarong Jiang, Alexander Hanbo Li, Rishav Chakravarti, Donald Weidner, Bing Xiang, Zhiguo Wang</i>	
StepGame: A New Benchmark for Robust Multi-Hop Spatial Reasoning in Texts	11321
<i>Zhengxiang Shi, Qiang Zhang, Aldo Lipani</i>	
MINIMAL: Mining Models for Universal Adversarial Triggers	11330
<i>Yaman Kumar Singla, Swapnil Parekh, Somesh Singh, Changyou Chen, Balaji Krishnamurthy, Rajiv Ratn Shah</i>	
Hierarchical Heterogeneous Graph Attention Network for Syntax-Aware Summarization	11340
<i>Zixing Song, Irwin King</i>	
Supervising Model Attention with Human Explanations for Robust Natural Language Inference	11349
<i>Joe Stacey, Yonatan Belinkov, Marek Rei</i>	
Hyperbolic Disentangled Representation for Fine-Grained Aspect Extraction	11358
<i>Chang-Yu Tai, Ming-Yao Li, Lun-Wei Ku</i>	
Procedural Text Understanding Via Scene-Wise Evolution	11367
<i>Jialong Tang, Hongyu Lin, Meng Liao, Yaojie Lu, Xianpei Han, Le Sun, Weijian Xie, Jin Xu</i>	
Debiasing NLU Models Via Causal Intervention and Counterfactual Reasoning	11376
<i>Bing Tian, Yixin Cao, Yong Zhang, Chunxiao Xing</i>	
Chess as a Testbed for Language Model State Tracking	11385
<i>Shubham Toshniwal, Sam Wiseman, Karen Livescu, Kevin Gimpel</i>	
Contrast-Enhanced Semi-Supervised Text Classification with Few Labels	11394
<i>Austin Cheng-Yun Tsai, Sheng-Ya Lin, Li-Chen Fu</i>	
Hybrid Autoregressive Inference for Scalable Multi-Hop Explanation Regeneration	11403
<i>Marco Valentino, Mokanarangan Thayaparan, Deborah Ferreira, André Freitas</i>	
DetIE: Multilingual Open Information Extraction Inspired by Object Detection	11412
<i>Michael Vasilkovsky, Anton Alekseev, Valentin Malykh, Ilya Shenbin, Elena Tutubalina, Dmitriy Salikhov, Mikhail Stepnov, Andrey Chertok, Sergey Nikolenko</i>	
Hybrid Neural Networks for On-Device Directional Hearing	11421
<i>Anran Wang, Maruchi Kim, Hao Zhang, Shyamnath Gollakota</i>	
Non-Parametric Online Learning from Human Feedback for Neural Machine Translation	11431
<i>Dongqi Wang, Haoran Wei, Zhirui Zhang, Shujian Huang, Jun Xie, Jiajun Chen</i>	
Parameter Differentiation Based Multilingual Neural Machine Translation	11440
<i>Qian Wang, Jiajun Zhang</i>	
DisenCite: Graph-Based Disentangled Representation Learning for Context-Specific Citation Generation	11449
<i>Yifan Wang, Yiping Song, Shuai Li, Chaoran Cheng, Wei Ju, Ming Zhang, Sheng Wang</i>	
HEAL: A Knowledge Graph for Distress Management Conversations	11459
<i>Anuradha Welivita, Pearl Pu</i>	
Deep Fusing Pre-Trained Models into Neural Machine Translation	11468
<i>Rongxiang Weng, Heng Yu, Weihua Luo, Min Zhang</i>	

VAST: The Valence-Assessing Semantics Test for Contextualizing Language Models	11477
<i>Robert Wolfe, Aylin Caliskan</i>	
A Label Dependence-Aware Sequence Generation Model for Multi-Level Implicit Discourse Relation Recognition	11486
<i>Changxing Wu, Liuwen Cao, Yubin Ge, Yang Liu, Min Zhang, Jinsong Su</i>	
Fast and Constrained Absent Keyphrase Generation by Prompt-Based Learning	11495
<i>Huanqin Wu, Baijiaxin Ma, Wei Liu, Tao Chen, Dan Nie</i>	
GraphMemDialog: Optimizing End-To-End Task-Oriented Dialog Systems Using Graph Memory Networks	11504
<i>Jie Wu, Ian G Harris, Hongzhi Zhao</i>	
Mastering the Explicit Opinion-Role Interaction: Syntax-Aided Neural Transition System for Unified Opinion Role Labeling	11513
<i>Shengqiong Wu, Hao Fei, Fei Li, Meishan Zhang, Yijiang Liu, Chong Teng, Donghong Ji</i>	
A Graph Convolutional Network with Adaptive Graph Generation and Channel Selection for Event Detection	11522
<i>Zhipeng Xie, Yumin Tu</i>	
Leashing the Inner Demons: Self-Detoxification for Language Models	11530
<i>Canwen Xu, Zexue He, Zhankui He, Julian McAuley</i>	
Zero-Shot Cross-Lingual Machine Reading Comprehension Via Inter-Sentence Dependency Graph	11538
<i>Liyan Xu, Xuchao Zhang, Bo Zong, Yanchi Liu, Wei Cheng, Jingchao Ni, Haifeng Chen, Liang Zhao, Jinho D. Choi</i>	
From Dense to Sparse: Contrastive Pruning for Better Pre-Trained Language Model Compression	11547
<i>Runxin Xu, Fuli Luo, Chengyu Wang, Baobao Chang, Jun Huang, Songfang Huang, Fei Huang</i>	
Sequence Level Contrastive Learning for Text Summarization	11556
<i>Shusheng Xu, Xingxing Zhang, Yi Wu, Furu Wei</i>	
Self-Supervised Knowledge Assimilation for Expert-Layman Text Style Transfer	11566
<i>Wenda Xu, Michael Saxon, Misha Sra, William Yang Wang</i>	
Text is No More Enough! a Benchmark for Profile-Based Spoken Language Understanding	11575
<i>Xiao Xu, Libo Qin, Kaiji Chen, Guoxing Wu, Linlin Li, Wanxiang Che</i>	
SAS: Self-Augmentation Strategy for Language Model Pre-Training	11586
<i>Yifei Xu, Jingqiao Zhang, Ru He, Liangzhu Ge, Chao Yang, Cheng Yang, Ying Nian Wu</i>	
Hybrid Curriculum Learning for Emotion Recognition in Conversation	11595
<i>Lin Yang, Yi Shen, Yue Mao, Longjun Cai</i>	
NumHTML: Numeric-Oriented Hierarchical Transformer Model for Multi-Task Financial Forecasting	11604
<i>Linyi Yang, Jiazheng Li, Ruihai Dong, Yue Zhang, Barry Smyth</i>	
Tracing Text Provenance Via Context-Aware Lexical Substitution	11613
<i>Xi Yang, Jie Zhang, Kejiang Chen, Weiming Zhang, Zehua Ma, Feng Wang, Nenghai Yu</i>	
Fusing Task-Oriented and Open-Domain Dialogues in Conversational Agents	11622
<i>Tom Young, Frank Xing, Vlad Pandealea, Jinjie Ni, Erik Cambria</i>	

JAKET: Joint Pre-Training of Knowledge Graph and Language Understanding	11630
<i>Donghan Yu, Chenguang Zhu, Yiming Yang, Michael Zeng</i>	
KID-Review: Knowledge-Guided Scientific Review Generation with Oracle Pre-Training	11639
<i>Weizhe Yuan, Pengfei Liu</i>	
Reference-Based Speech Enhancement Via Feature Alignment and Fusion Network.....	11648
<i>Huanjing Yue, Wenxin Duo, Xiulian Peng, Jingyu Yang</i>	
MDD-Eval: Self-Training on Augmented Data for Multi-Domain Dialogue Evaluation	11657
<i>Chen Zhang, Luis Fernando D'Haro, Thomas Friedrichs, Haizhou Li</i>	
Efficient Dialog Policy Learning by Reasoning with Contextual Knowledge	11667
<i>Haodi Zhang, Zhichao Zeng, Keting Lu, Kaishun Wu, Shiqi Zhang</i>	
Hierarchical Cross-Modality Semantic Correlation Learning Model for Multimodal Summarization	11676
<i>Litian Zhang, Xiaoming Zhang, Junshu Pan</i>	
Adversarial Data Augmentation for Task-Specific Knowledge Distillation of Pre-Trained Transformers	11685
<i>Minjia Zhang, Niranjan Uma Naresh, Yuxiong He</i>	
Text-Based Interactive Recommendation Via Offline Reinforcement Learning.....	11694
<i>Ruiyi Zhang, Tong Yu, Yilin Shen, Hongxia Jin</i>	
DKPLM: Decomposable Knowledge-Enhanced Pre-Trained Language Model for Natural Language Understanding	11703
<i>Taolin Zhang, Chengyu Wang, Nan Hu, Minghui Qiu, Chengguang Tang, Xiaofeng He, Jun Huang</i>	
Frequency-Aware Contrastive Learning for Neural Machine Translation	11712
<i>Tong Zhang, Wei Ye, Baosong Yang, Long Zhang, Xingzhang Ren, Dayiheng Liu, Jinan Sun, Shikun Zhang, Haibo Zhang, Wen Zhao</i>	
Probing Word Syntactic Representations in the Brain by a Feature Elimination Method.....	11721
<i>Xiaohan Zhang, Shaonan Wang, Nan Lin, Jiajun Zhang, Chengqing Zong</i>	
Unsupervised Sentence Representation Via Contrastive Learning with Mixing Negatives	11730
<i>Yanzhao Zhang, Richong Zhang, Samuel Mensah, Xudong Liu, Yongyi Mao</i>	
RetGen: A Joint Framework for Retrieval and Grounded Text Generation Modeling.....	11739
<i>Yizhe Zhang, Siqi Sun, Xiang Gao, Yuwei Fang, Chris Brockett, Michel Galley, Jianfeng Gao, Bill Dolan</i>	
BiRdQA: A Bilingual Dataset for Question Answering on Tricky Riddles	11748
<i>Yunxiang Zhang, Xiaojun Wan</i>	
UniMS: A Unified Framework for Multimodal Summarization with Knowledge Distillation	11757
<i>Zhengkun Zhang, Xiaojun Meng, Yasheng Wang, Xin Jiang, Qun Liu, Zhenglu Yang</i>	
DialogLM: Pre-Trained Model for Long Dialogue Understanding and Summarization.....	11765
<i>Ming Zhong, Yang Liu, Yichong Xu, Chenguang Zhu, Michael Zeng</i>	
Idiomatic Expression Paraphrasing Without Strong Supervision.....	11774
<i>Jianing Zhou, Ziheng Zeng, Hongyu Gong, Suma Bhat</i>	

Multilingual Code Snippets Training for Program Translation..... 11783
Ming Zhu, Karthik Suresh, Chandan K Reddy

Author Index