Hao Zhou

Tel: (+86) 150-0518-7136 | haozhou0806@gmail.com | https://zhouh.github.io

EDUCATION

Nanjing University

Nanjing, China

Aug. 2012 - May 2017

Ph.D., Computer Science

• Dissertation: Research on Syntax Parsing using Neural Networks. (winning CAAI Doctoral Dissertation Award)

• Advisor: Prof. Jiajun Chen

Nanjing Normal University

Nanjing, China

B.S., Computer Science

Aug. 2008 - May 2012

• Thesis: Confidence Weighted Algorithm for Chinese Word Segmentation.

• Advisor: Prof. Junsheng Zhou

EMPLOYMENT

Insititute for AI Industry Research, Tsinghua University

Beijing

Research Associate Professor

Apr. 2022 - Present

• I mainly focus on studying deep structured prediction models, aiming to develop accurate and fast algorithms for text generation and AI assisted drug design.

ByteDance AI Lab

Beijing & Shanghai, China

June 2017 - March 2022

Research Scientist and Manager

In ByteDance, I lead the R&D teams of text generation and drug discovery and focus on developing machine learning models to generate discrete symbols, including text, molecular and protein.

• Deep Generative Models for Text Generation: designing deep generative models to generate high quality text and launching them in ByteDance's products.

Highlight1: Developing novel text generation techniques and deploying them to the large scale advertising system of ByteDance, which gains 10 million daily revenue.

Highlight2: Our proposed Glancing Transformer (GLAT, ACL'21a) has been deployed to VolcTrans, GLAT is the first deployed non-autoregressive generation system in the world with 10X speedup.

Highlight3: leading projects like Anything2Text and Business NLP, launching hundreds of models in ByteDance's business.

Anything2Text is the in-house middle platform of text generation technique and Business NLP offering text understanding services for Advertisements, Sales and E-Commerce.

• AI Powered Drug Discovery: utilizing AI approach to accelerate the process of discovering novel drugs for specific diseases.

Highlight: Our proposed MARS (Markov Molecular Sampling, ICLR'2021 spotlight) has been the new SOTA in molecular generation, especially in the setting of multi-objective optimization (e.g. considering multiple protein activities).

Huawei Noah Ark's Lab

Hong Kong

Research Intern

Oct. 2016 - Feb. 2017

- Chunked-Based Neural Machine Translation with Bi-Scale Decoder
- Mentor: Dr. Zhaopeng Tu & Dr. Hang Li

Singapore University of Technology and Design

Singapore

Visiting Researcher

Oct. 2014 - Feb. 2015

• Deep Structured Prediction Models for NLP

Highlight: We propose the first neural structured prediction model for NLP and it motivates a dozen of following work including $\overline{ACL'2016}$ outstanding paper and EMNLP'2016 best paper honourable mention.

• Host: Prof. Yue Zhang

Awards

CCF NLPCC Distinguished Young Scientist Award, 2021

Best Paper Award of ACL, 2021

CAAI Doctoral Dissertation Award, 2019

Outstanding Doctoral Dissertation of Nanjing University, 2019

National Scholarship for Graduate Student, 2016

National Scholarship for Undergraduate Student, 2011

Feixiaotong Scholarship, 2010

Underline indicates students working with me.

- [61] Yiran Chen, Zhenqiao Song, Xianze Wu, Danqing Wang, Jingjing Xu, Jiaze Chen, **Hao Zhou**, and Lei Li. "MTG: A Benchmark Suite for Multilingual Text Generation". In: *Proceedings of the 2022 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT Findings)*. July 2022. eprint: https://arxiv.org/abs/2108.07140.
- [60] Yu Bao, **Hao Zhou**, Shujian Huang, Dongqi Wang, Lihua Qian, Xinyu Dai, Jiajun Chen, and Lei Li. "latent-GLAT: Glancing at Latent Variables for Parallel Text Generation". In: the 60th Annual Meeting of the Association for Computational Linguistics (ACL). May 2022. eprint: https://openreview.net/forum?id=y4xCe0MSoWx.
- [59] Zhiyi Fu, Wangchunshu Zhou, Jingjing Xu, **Hao Zhou**, and Lei Li. "Contextual Representation Learning beyond Masked Language Modeling". In: the 60th Annual Meeting of the Association for Computational Linguistics (ACL). May 2022. eprint: https://openreview.net/forum?id=KWL_ElhUejN.
- [58] Jiangjie Chen, Rui Xu, Ziquan Fu, Wei Shi, Zhongqiao Li, Xinbo Zhang, Changzhi Sun, Lei Li, Yanghua Xiao, and **Hao Zhou**. "E-KAR: A Benchmark for Rationalizing Natural Language Analogical Reasoning". In: the 60th Annual Meeting of the Association for Computational Linguistics (ACL) Findings. May 2022. eprint: https://openreview.net/forum?id=9kXOFRtrEj. URL: https://ekar-leaderboard.github.io.
- [57] Zewei Sun, Mingxuan Wang, **Hao Zhou**, Chengqi Zhao, Shujian Huang, Jiajun Chen, and Lei Li. "Rethinking Document-level Neural Machine Translation". In: the 60th Annual Meeting of the Association for Computational Linguistics (ACL) Findings. May 2022. eprint: https://openreview.net/forum?id=sU9fYzNZ3xX.
- [56] Zhenqiao Song, **Hao Zhou**, Lihua Qian, Jingjing Xu, Shanbo Cheng, Mingxuan Wang, and Lei Li. "switch-GLAT: Multilingual Parallel Machine Translation via Code-switch Decoder". In: *International Conference on Learning Representations (ICLR)*. Apr. 2022. eprint: https://openreview.net/forum?id=5HvpvYd68b.
- [55] <u>Huiyun Yang</u>, Huadong Chen, **Hao Zhou**, and Lei Li. "Enhancing Cross-lingual Transfer by Manifold Mixup". In: *International Conference on Learning Representations (ICLR)*. Apr. 2022. eprint: https://openreview.net/forum?id=OjPmfr9GkVv.
- [54] Chenyang Huang, **Hao Zhou**, Osmar Zaiane, Lili Mou, and Lei Li. "Non-Autoregressive Translation with Layer-Wise Prediction and Deep Supervision". In: *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*. Feb. 2022. eprint: https://arxiv.org/abs/2110.07515.
- [53] <u>Jiangjie Chen</u>, <u>Chun Gan</u>, Sijie Chen, **Hao Zhou**, Yanghua Xiao, and Lei Li. "Unsupervised Editing for Counterfactual Stories". In: *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*. 2022.
- [52] Jiangjie Chen, Qiaoben Bao, Changzhi Sun, Xinbo Zhang, Jiaze Chen, **Hao Zhou**, Yanghua Xiao, and Lei Li. "LOREN: Logic-Regularized Reasoning for Interpretable Fact Verification". In: *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*. 2022.
- [51] Zaixiang Zheng, **Hao Zhou**, Shujian Huang, Jiajun Chen, Jingjing Xu, and Lei Li. "Duplex Sequence-to-Sequence Learning for Reversible Machine Translation". In: the 35th Conference on Neural Information Processing Systems (NeurIPS). Dec. 2021. eprint: https://arxiv.org/abs/2105.03458.
- [50] <u>Lihua Qian</u>, <u>Yi Zhou</u>, <u>Zaixiang Zheng</u>, Yaoming Zhu, Zehui Lin, Jiangtao Feng, Shanbo Cheng, Lei Li, Mingxuan Wang, and **Hao Zhou**. "The Volctrans GLAT System: Non-autoregressive Translation Meets WMT21". In: Sixth Conference on Machine Translation (WMT21). Nov. 2021. eprint: https://arxiv.org/abs/2109.11247.
- [49] Dongyu Ru, Changzhi Sun, Jiangtao Feng, Lin Qiu, **Hao Zhou**, Weinan Zhang, Yong Yu, and Lei Li. "Learning Logic Rules for Document-level Relation Extraction". In: the Conference on Empirical Methods in Natural Language Processing (EMNLP). Nov. 2021.

- [48] Danqing Wang, Jiaze Chen, Xianze Wu, **Hao Zhou**, and Lei Li. "CNewSum: A Large-scale Chinese News Summarization Dataset with Human-annotated Adequacy and Deducibility Level". In: *The 10th CCF International Conference on Natural Language Processing and Chinese Computing (NLPCC)*. Qingdao, China, Oct. 2021. eprint: https://arxiv.org/abs/2110.10874. URL: https://dqwang122.github.io/projects/CNewSum/.
- [47] Wenxian Shi, Yuxuan Song, Bohan Li, **Hao Zhou**, and Lei Li. "Follow Your Path: a Progressive Method for Knowledge Distillation". In: the European Conference on Machine Learning and Principles and Practice of Knowledge Discovery in Databases (ECML-PKDD). July 2021.
- [46] <u>Lihua Qian</u>, **Hao Zhou**, <u>Yu Bao</u>, Mingxuan Wang, Lin Qiu, Weinan Zhang, Yong Yu, and Lei Li. "Glancing Transformer for Non-Autoregressive Neural Machine Translation". In: the 59th Annual Meeting of the Association for Computational Linguistics (ACL). July 2021.
- [45] <u>Jingjing Xu</u>, **Hao Zhou**, <u>Chun Gan</u>, <u>Zaixiang Zheng</u>, and Lei Li. "Vocabularization via Optimal Transport for Neural Machine Translation". In: the 59th Annual Meeting of the Association for Computational Linguistics (ACL) Best Paper Award. July 2021.
- [44] Yijun Wang, Changzhi Sun, Yuanbin Wu, Hao Zhou, Lei Li, and Junchi Yan. "A Unified Label Space for Entity Relation Extraction". In: the 59th Annual Meeting of the Association for Computational Linguistics (ACL). July 2021.
- [43] Changzhi Sun, Xinbo Zhang, Jiangjie Chen, Chun Gan, Yuanbin Wu, Jiaze Chen, **Hao Zhou**, and Lei Li. "Probabilistic Graph Reasoning for Natural Proof Generation". In: the 59th Annual Meeting of the Association for Computational Linguistics (ACL) Finding. July 2021.
- [42] Danqing Wang, Jiaze Chen, **Hao Zhou**, Xipeng Qiu, and Lei Li. "Contrastive Aligned Joint Learning for Multilingual Summarization". In: the 59th Annual Meeting of the Association for Computational Linguistics (ACL) Finding. July 2021.
- [41] Yijun Wang, Changzhi Sun, Yuanbin Wu, **Hao Zhou**, Lei Li, and Junchi Yan. "ENPAR: Enhancing Entity and Entity Pair Representations for Joint Entity Relation Extraction". In: *Proceedings of European Chapter of the Association for Computational Linquistics (EACL)*. Apr. 2021.
- [40] Yutong Xie, Chence Shi, Hao Zhou, Yuwei Yang, Weinan Zhang, Yong Yu, and Lei Li. "MARS: Markov Molecular Sampling for Multi-objective Drug Discovery". In: International Conference on Learning Representations (ICLR) - Spotlight. Mar. 2021.
- [39] Xunpeng Huang, Runxin Xu, **Hao Zhou**, Zhe Wang, Zhengyang Liu, and Lei Li. "ACMo: Angle-Calibrated Moment Methods for Stochastic Optimization". In: *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*. Feb. 2021.
- [38] Qianqian Dong, Rong Ye, Mingxuan Wang, **Hao Zhou**, Shuang Xu, Bo Xu, and Lei Li. "Listen, Understand and Translate: Triple Supervision Decouples End-to-end Speech-to-text Translation". In: *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*. Feb. 2021.
- [37] Qianqian Dong, Mingxuan Wang, **Hao Zhou**, Shuang Xu, Bo Xu, and Lei Li. "Consecutive Decoding for Speech-to-text Translation". In: *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*. Feb. 2021.
- [36] Zhenqiao Song, Jiaze Chen, **Hao Zhou**, and Lei Li. "Triangular Bidword Generation for Sponsored Search Auction". In: *Proceedings of the 14th International Conference on Web Search and Data Mining (WSDM)*. 2021.
- [35] <u>Bohan Li</u>, **Hao Zhou**, Junxian He, Mingxuan Wang, Yiming Yang, and Lei Li. "On the Sentence Embeddings from Pre-trained Language Models". In: the Conference on Empirical Methods in Natural Language Processing (EMNLP). Nov. 2020.
- [34] Zehui Lin, Xiao Pan, Mingxuan Wang, Xipeng Qiu, Jiangtao Feng, **Hao Zhou**, and Lei Li. "Pre-training Multilingual Neural Machine Translation by Leveraging Alignment Information". In: the Conference on Empirical Methods in Natural Language Processing (EMNLP). Nov. 2020.

- [33] <u>Dongyu Ru</u>, Jiangtao Feng, <u>Lin Qiu</u>, **Hao Zhou**, Mngxuan Wang, Weinan Zhang, Yong Yu, and Lei Li. "Active Sentence Learning by Adversarial Uncertainty Sampling in Discrete Space". In: the Conference on Empirical Methods in Natural Language Processing (EMNLP) Findings. Nov. 2020.
- [32] <u>Wenxian Shi</u>, **Hao Zhou**, Ning Miao, and Lei Li. "Dispersing Exponential Family Mixture VAEs for Interpretable Text Generation". In: *Proceedings of the 37th International Conference on Machine learning (ICML)*. July 2020.
- [31] <u>Dongyu Ru</u>, <u>Zhenghui Wang</u>, <u>Lin Qiu</u>, **Hao Zhou**, Lei Li, Weinan Zhang, and Yong Yu. "QuAChIE: Question Answering based Chinese Information Extraction System". In: the 43rd International ACM SIGIR Conference on Research and Development in Information Retrieval (SIGIR) System Demonstrations. July 2020.
- [30] Ning Miao, Yuxuan Song, **Hao Zhou**, and Lei Li. "Do you have the right scissors? Tailoring Pre-trained Language Models via Monte-Carlo Methods". In: the 58th Annual Meeting of the Association for Computational Linguistics (ACL) short papers. July 2020.
- [29] Xianggen Liu, Lili Mou, Fandong Meng, **Hao Zhou**, Jie Zhou, and Sen Song. "Unsupervised Paraphrasing by Simulated Annealing". In: *Proceedings of the 58th Annual Meeting of the Association for Computational Linguistics (ACL)*. July 2020.
- [28] Runxin Xu et al. "Xiaomingbot: A Multilingual Robot News Reporter". In: the 58th Annual Meeting of the Association for Computational Linguistics (ACL) System Demonstrations. July 2020.
- [27] Yuxuan Song, Ning Miao, **Hao Zhou**, Lantao Yu, Mingxuan Wang, and Lei Li. "Improving Maximum Likelihood Training for Text Generation with Density Ratio Estimation". In: *The 23rd International Conference on Artificial Intelligence and Statistics (AISTATS)*. Aug. 2020.
- [26] Rong Ye, Wenxian Shi, **Hao Zhou**, Zhongyu Wei, and Lei Li. "Variational Template Machine for Data-to-Text Generation". In: *International Conference on Learning Representations (ICLR)*. Apr. 2020.
- [25] Zaixiang Zheng, **Hao Zhou**, Shujian Huang, Lei Li, Xinyu Dai, and Jiajun Chen. "Mirror Generative Models for Neural Machine Translation". In: *International Conference on Learning Representations (ICLR) Oral*. Apr. 2020.
- [24] Yuxuan Song, Minkai Xu, Lantao Yu, **Hao Zhou**, Shuo Shao, and Yong Yu. "Infomax Neural Joint Source-Channel Coding via Adversarial Bit Flip". In: the 34th AAAI Conference on Artificial Intelligence (AAAI). Feb. 2020.
- [23] Jiacheng Yang, Mingxuan Wang, **Hao Zhou**, Chengqi Zhao, Weinan Zhang, Yong Yu, and Lei Li. "Towards Making the Most of BERT in Neural Machine Translation". In: the 34th AAAI Conference on Artificial Intelligence (AAAI). Feb. 2020.
- [22] Qingyang Wu, Lei Li, **Hao Zhou**, Ying Zeng, and Zhou Yu. "Importance-Aware Learning for Neural Headline Editing". In: the 34th AAAI Conference on Artificial Intelligence (AAAI). Feb. 2020.
- [21] Yao Fu, Hao Zhou, Jiaze Chen, and Lei Li. "Rethinking Text Attribute Transfer: A Lexical Analysis". In: the 12th International Conference on Natural Language Generation (INLG). Oct. 2019.
- [20] Ning Miao, **Hao Zhou**, Chengqi Zhao, Wenxian Shi, and Lei Li. "Kernelized Bayesian Softmax for Text Generation". In: the 33rd Conference on Neural Information Processing Systems (NeurIPS). Dec. 2019.
- [19] <u>Lin Qiu</u>, <u>Yunxuan Xiao</u>, <u>Yanru Qu</u>, **Hao Zhou**, Lei Li, Weinan Zhang, and Yong Yu. "Dynamically Fused Graph Network for Multi-hop Reasoning". In: *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics (ACL)*. July 2019.
- [18] <u>Huangzhao Zhang</u>, **Hao Zhou**, <u>Ning Miao</u>, and Lei Li. "Generating Fluent Adversarial Examples for Natural Languages". In: *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics (ACL) short papers*. July 2019.
- [17] Yu Bao, **Hao Zhou**, Shujian Huang, Lei Li, Lili Mou, Olga Vechtomova, Xin-yu Dai, and Jiajun Chen. "Generating Sentences from Disentangled Syntactic and Semantic Spaces". In: *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics (ACL)*. July 2019.

- [16] Bingzhen Wei, Mingxuan Wang, **Hao Zhou**, Junyang Lin, and Xu Sun. "Imitation Learning for Non-Autoregressive Neural Machine Translation". In: *Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics (ACL)*. July 2019.
- [15] Rongxiang Weng, **Hao Zhou**, Shujian Huang, Lei Li, Yifan Xia, and Jiajun Chen. "Correct-and-Memorize: Learning to Translate from Interactive Revisions". In: *Proceedings of the Twenty-Eighth International Joint Conference on Artificial Intelligence (IJCAI)*. July 2019.
- [14] Zhaoyue Sun, Jiaze Chen, **Hao Zhou**, Deyu Zhou, Lei Li, and Mingmin Jiang. "GraspSnooker: Automatic Chinese Commentary Generation for Snooker Videos". In: the 28th International Joint Conference on Artificial Intelligence (IJCAI) System Demonstrations. Aug. 2019.
- [13] Hareesh Bahuleyan, Lili Mou, **Hao Zhou**, and Olga Vechtomova. "Stochastic Wasserstein Autoencoder for Probabilistic Sentence Generation". In: *Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linquistics (NAACL)*. June 2019.
- [12] Bolin Wei, Shuai Lu, Lili Mou, **Hao Zhou**, Pascal Poupart, Ge Li, and Zhi Jin. "Why do neural dialog systems generate short and meaningless replies? a comparison between dialog and translation". In: *International Conference on Acoustics, Speech and Signal Processing (ICASSP)*. 2019.
- [11] Ning Miao, **Hao Zhou**, Lili Mou, Rui Yan, and Lei Li. "Cgmh: Constrained sentence generation by metropolis-hastings sampling". In: *Proceedings of the AAAI Conference on Artificial Intelligence (AAAI)*. 2019.
- [10] <u>Wei Cao</u>, Dong Wang, Jian Li, **Hao Zhou**, Lei Li, and Yitan Li. "BRITS: Bidirectional Recurrent Imputation for Time Series". In: Advances in Neural Information Processing Systems (NIPS). 2018.
- [9] <u>Haoyue Shi</u>, **Hao Zhou**, Jiaze Chen, and Lei Li. "On Tree-Based Neural Sentence Modeling". In: <u>Proceedings</u> of the Conference on Empirical Methods in Natural Language Processing (EMNLP). 2018.
- [8] Zaixiang Zheng, **Hao Zhou**, Shujian Huang, Lili Mou, Xinyu Dai, Jiajun Chen, and Zhaopeng Tu. "Modeling Past and Future for Neural Machine Translation". In: *Transactions of the Association for Computational Linguistics (TACL)* (2018).
- [7] **Hao Zhou**, Zhenting Yu, Yue Zhang, Shujian Huang, Xinyu Dai, and Jiajun Chen. "Word-Context Character Embeddings for Chinese Word Segmentation". In: *Proceedings of the 2017 Conference on Empirical Methods in Natural Language Processing (EMNLP)*. Sept. 2017.
- [6] **Hao Zhou**, Zhaopeng Tu, Shujian Huang, Xiaohua Liu, Hang Li, and Jiajun Chen. "Chunk-Based Bi-Scale Decoder for Neural Machine Translation". In: *Proceedings of the 55th Annual Meeting of the Association for Computational Linguistics (ACL) short papers*. July 2017.
- [5] **Hao Zhou**, Yue Zhang, Shujian Huang, Junsheng Zhou, Xin-Yu Dai, and Jiajun Chen. "A Search-Based Dynamic Reranking Model for Dependency Parsing". In: *Proceedings of the 54th Annual Meeting of the Association for Computational Linguistics (ACL)*. Aug. 2016.
- [4] **Hao Zhou**, Yue Zhang, Shujian Huang, Xin-Yu Dai, and Jiajun Chen. "Evaluating a Deterministic Shift-Reduce Neural Parser for Constituent Parsing". In: *Proceedings of the Tenth International Conference on Language Resources and Evaluation (LREC)*. May 2016.
- [3] **Hao Zhou**, Yue Zhang, Chen Chuan, Shujian Huang, Dai Xinyu, and Jiajun Chen. "A Neural Probabilistic Structured-Prediction Method for Transition-Based Natural Language Processing". In: *Journal of Artificial Intelligence Research (JAIR)* (2016).
- [2] **Hao Zhou**, Shujian Huang, Junsheng Zhou, Yue Zhang, Huadong Chen, Xinyu Dai, Chuan Chen, and Jiajun Chen. "Enhancing Shift-Reduce Constituent Parsing with Action N-Gram Model". In: *ACM Transactions on Asian and Low-Resource Language Information Processing (TALLIP)* (2015).
- [1] **Hao Zhou**, Yue Zhang, Shujian Huang, and Jiajun Chen. "A Neural Probabilistic Structured-Prediction Model for Transition-Based Dependency Parsing". In: *Proceedings of the 53th Annual Meeting of the Association for Computational Linguistics (ACL)*. 2015.

- 1. Duplex Sequence to Sequence Learning for Reversible Machine Translation, NLGIW, online, April, 2022.
- 2. Advances of Large Scaled Parallel Text Generation, Tsinghua University, online, December, 2021.
- 3. Advances of Large Scaled Parallel Text Generation, NLG workshop of CNCC, Shenzhen, December, 2021.
- 4. Advances of Large Scaled Parallel Text Generation, Tsinghua University, online, December, 2021.
- 5. Towards the Best Practice of Parallel Text Generation, Northeastern University, Shenyang, July, 2021.
- 6. MARS: Markov Molecular Sampling for Multi-objective Drug Discovery, Chinese Medicinal Chemistry Symbolism, Shenyang, October, 2021.
- 7. Towards the Best Practice of Parallel Text Generation, CCFAI, Yantai, July, 2021.
- 8. Sampling in the Discrete Sentence Space, Harbin Institute of Technology, Harbin, May, 2021.
- 9. Frontier Theory and Best Practice of Text Generation, Nanjing Normal University, Nanjing, December, 2020.
- 10. Frontier Theory and Best Practice of Text Generation, Shanghai Jiaotong University, Shanghai, December, 2020.
- 11. Frontier Review of Language Generation, CCL, online, November, 2020.
- 12. Latent Variable Models for NLP, WestLake University, Hangzhou, January, 2020.
- 13. Advances of Deep Text Generation, Nanjing University, Nanjing, September, 2019.
- 14. Advances of Deep Text Generation, Fudan University, Shanghai, June, 2019.
- 15. CGMH: A Novel Constrained Text Generation Approach, Ctrip Inc, Shanghai, April, 2019
- 16. AI-Assisted Content Creation, CCF Tech Frontier, Shanghai, April, 2019.
- 17. On Tree-Based Neural Sentence Modeling, Microsoft Research Asian, Beijing, 2018.
- 18. Advice for New PhD Students, NLPCC, Hohhot, November, 2018.
- 19. Modeling Past and Future for Neural Machine Translation, CWMT, Dalian, November, 2017.
- 20. Chunk-Based Bi-Scale Decoder for Neural Machine Translation, Amazon, Berlin, March, 2017.

TEACHING EXPERIENCE

- 1. Tutorial: Recent Advances and Best Practice of Parallel Text Generation, NLGIW, online, 2022.
- 2. Tutorial: Deep Generative Models for Text Generation, CCMT, online, 2020.
- 3. Tutorial: Deep Generative Models for Text Generation, CAAI-AIDL, Shanghai, December, 2019.
- 4. Tutorial: Discreteness in Natural Language Processing, EMNLP, Hong Kong, November, 2019.
- 5. Tutorial: Deep Generative Models for Text Generation, CCF-ADL, Dunhuang, October, 2019.
- 6. Fundamental Programming in C++, Teaching Assistant, Nanjing University, 2012
- 7. Fundamental Programming in C++, Teaching Assistant, Nanjing University, 2013
- 8. Advanced Programming in C++, Teaching Assistant, Nanjing University, 2013

STUDENTS ADVISING

- 39. Chengyang Huang (intern at ByteDance, UoA Ph.D, Nov. 2020 Feb. 2022)
- 38. Fei Huang (intern at ByteDance, Tsinghua Ph.D, Nov. 2020 Feb. 2022)
- 37. Dongyu Xue (intern at ByteDance, TongjiU Ph.D→ByteDance FTE, June. 2021 Feb. 2022)
- 36. Zeyu Wen (intern at ByteDance, HUST Ph.D, June. 2021 Feb. 2022)
- 35. Siyu Long (intern at ByteDance, NJU Ph.D, June. 2021 Feb. 2022)
- 34. Lihao Wang (intern at ByteDance, FDU master -> ByteDance FTE, June. 2021 Feb. 2022)
- 33. Siqi Ouyang (intern at ByteDance, Tsinghua undergrad→UCSB Ph.D , June. 2021 Aug. 2021)
- 32. Jiaqi Zhang (intern at ByteDance, PKU undergrad → MIT Ph.D, Jun 2020 June. 2021)
- 31. Yilun Shen (intern at ByteDance, Tsinghua undergrad, Mar. 2021 June. 2021)
- 30. Shitong Luo (intern at ByteDance, PKU undergrad \rightarrow CMU master, Mar. 2021 May. 2021)
- 29. Zaixiang Zheng (intern at ByteDance, NJU Ph.D-ByteDance FTE, Nov 2020 Feb. 2021)

- 28. Chun Gan (intern at ByteDance, UW-Madison Ph.D, Aug. 2020 Feb. 2021)
- 27. Lihua Qian (intern at ByteDance, SJTU master→ByteDance FTE, Dec. 2019 Feb. 2021)
- 26. Demi Guo (intern at ByteDance, Harvard undergrad→Stanford Ph.D, Jul. 2020 Nov. 2020)
- 25. Chence Shi (intern at ByteDance, PKU undergrad→Mila Ph.D, Jul. 2020 Sep. 2020)
- 24. Yutong Xie (intern at ByteDance, SJTU undergrad→UMich Ph.D, Nov 2020 Oct.)
- 23. Bohan Li (intern at ByteDance, CMU Ph.D, Dec. 2019 Jun. 2020)
- 22. Xinyu Zhang (intern at ByteDance, FDU Ph.D, Jun. 2019 Apr. 2020)
- 21. Jingjing Gong (intern at ByteDance, FDU Ph.D, Sep. 2019 Jan. 2020)
- 20. Yuxuan Song (intern at Byte
Dance, SJTU master \rightarrow Bytedance SDE, Sep. 2019 Apr. 2020)
- 19. Rong Ye (intern at ByteDance, FDU master→Bytedance SDE, Apr. 2019 Apr. 2020)
- 18. Danlu Chen (intern at ByteDance, FDU undergrad→UCSD Ph.D, Sep. 2019 Dec. 2020)
- 17. Chi Sun (intern at ByteDance, FDU master→Tencent SDE, Apr. 2019 Oct. 2019)
- 16. Zhangqing Shan (intern at ByteDance, FDU Ph.D→Shanghai Stock Exchange, Jun. 2019 Sep. 2019)
- 15. Yu Bao (intern at ByteDance, NJU Ph.D→ByteDance FTE, Jan. 2019 Sep. 2019)
- 14. Lin Qiu (intern at ByteDance, SJTU Ph.D→BoyuAI CEO, Jan. 2019 May 2019)
- 13. Qi Zeng (intern at ByteDance, PKU undergrad→UIUC Ph.D, Apr. 2019 Aug. 2019)
- 12. Dongyu Ru (intern at ByteDance, SJTU undergrad → SJTU master, Jan. 2019 May 2019)
- 11. Zhenghui Wang (intern at ByteDance, SJTU undergrad→GATech Ph.D, Jan. 2019 May 2019)
- 10. Junkun Chen (intern at ByteDance, FDU master→OSU Ph.D, Feb. 2019 Jun. 2019)
- 9. Yanru Qu (intern at ByteDance, SJTU master \(\to UIUC \) Ph.D, Apr. 2019 Aug. 2019)
- 8. Wenxian Shi (intern at ByteDance, PKU master→ByteDance SDE→MIT Ph.D, Dec. 2018 Jul. 2019)
- 7. Ning Miao (intern at ByteDance, PKU master → ByteDance SDE → Oxford Ph.D, Apr. 2018 Sep. 2020)
- 6. Huangzhao Zhang (intern at ByteDance, PKU undergrad→PKU Ph.D, Oct. 2018 Mar. 2019)
- 5. Zewei Sun (intern at Byte
Dance, NJU master \rightarrow Bytedance SDE, May 2018 Sep
. 2018)
- 4. Yao Fu (intern at ByteDance, PKU undergrad→Edinburgh Ph.D, Sep. 2018 Apr. 2019)
- 3. Haoyue Shi (intern at ByteDance, PKU undergrad \rightarrow TTIC Ph.D, Feb. 2018 Jun. 2019)
- 2. Rongxiang Weng (intern at ByteDance, NJU master → Alibaba SDE, Oct. 2017 Jan. 2018)
- 1. Zi-Yi Dou (NJU undergrad→CMU master->UCLA Ph.D, Nov 2016 Apr. 2017)