

Jingqing Zhang

+44 0 7422 942641 | jingqing.zhang15@imperial.ac.uk | <http://www.doc.ic.ac.uk/~jz9215/>

Education

PHD | 2017.10 - 2021 (EXPECTED) | IMPERIAL COLLEGE LONDON | UK

- Department of Computing, Data Science Institute, EPSRC CDT in HiPEDS
- Research interests: Natural Language Processing, Deep Learning, Machine Learning, Data Mining
- Supervisor: Prof. Yike Guo

M.RES | 2016.10 - 2017.09 | IMPERIAL COLLEGE LONDON | UK

- Department of Computing, Degree with **Distinction**
- Courses include: Mathematical for Inference and Machine Learning, Computational Optimisation, Dynamical System and Deep Learning

B.ENG | 2012.08 - 2016.07 | TSINGHUA UNIVERSITY | CHINA

- Department of Computer Science and Technology, **Overall GPA: 91/100, Ranking: 9/116**
- Courses include: Computer Architecture, Data Mining, Artificial Neural Networks, Data Structures, Discrete Mathematics, Numerical Analysis, Programming, Probability and Statistics, Linear Algebra, Calculus, Physics for Scientists and Engineers

Work Experience

RESEARCH INTERN | 2019.09 - 2019.12 | GOOGLE RESEARCH, BRAIN TEAM | CA, USA

- Propose PEGASUS, a pre-training model tailored for abstractive text summarization, which achieves state-of-the-art performance on all 12 downstream datasets we consider.

Books

DEEP REINFORCEMENT LEARNING: FUNDAMENTALS, RESEARCH AND APPLICATIONS

- Hao Dong, Zihan Ding, Shanghang Zhang, **Jingqing Zhang**, et al. Springer Nature, 2020.
<https://github.com/deep-reinforcement-learning-book>

DEEP LEARNING USING TENSORLAYER

- Hao Dong, Yike Guo, Guang Yang, **Jingqing Zhang**, et al. Book in Chinese. Publishing House of Electronics Industry, 2018, ISBN: 9787121326226.

Publications

PEGASUS: PRE-TRAINING WITH EXTRACTED GAP-SENTENCES FOR ABSTRACTIVE SUMMARIZATION

- **Jingqing Zhang***, Yao Zhao*, Mohammad Saleh, Peter J. Liu. arXiv preprint arXiv:1912.08777 (2019).

UNSUPERVISED ANNOTATION OF PHENOTYPIC ABNORMALITIES VIA SEMANTIC LATENT REPRESENTATIONS ON ELECTRONIC HEALTH RECORDS

- **Jingqing Zhang**, Xiaoyu Zhang, Kai Sun, Xian Yang, Chengliang Dai, Yike Guo. 2019 IEEE International Conference on Bioinformatics and Biomedicine (BIBM).

INTEGRATED MULTI-OMICS ANALYSIS USING VARIATIONAL AUTOENCODERS: APPLICATION TO PAN-CANCER CLASSIFICATION

- Xiaoyu Zhang, **Jingqing Zhang**, Kai Sun, Xian Yang, Chengliang Dai, Yike Guo. 2019 IEEE International Conference on Bioinformatics and Biomedicine (BIBM).

INTEGRATING SEMANTIC KNOWLEDGE TO TACKLE ZERO-SHOT TEXT CLASSIFICATION

- **Jingqing Zhang***, Piyawat Lertvittayakumjorn*, Yike Guo. In Proceedings of the 2019 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL-HLT), 2019. **Oral**.

DEEP SEQUENCE LEARNING WITH AUXILIARY INFORMATION FOR TRAFFIC PREDICTION

- Binbing Liao*, **Jingqing Zhang***, Chao Wu, Douglas McIlwraith, Tong Chen, Shengwen Yang, Yike Guo, and Fei Wu. In Proceedings of the 24th ACM SIGKDD International Conference on Knowledge Discovery and Data Mining, ACM, 2018.

DEST-RESNET: A DEEP SPATIOTEMPORAL RESIDUAL NETWORK FOR HOTSPOT TRAFFIC SPEED PREDICTION

- Binbing Liao, **Jingqing Zhang**, Ming Cai, Siliang Tang, Yifan Gao, Chao Wu, Shengwen Yang, Wenwu Zhu, Yike Guo, Fei Wu. In Proceedings of the 2018 ACM on Multimedia Conference. ACM, 2018.

THE DEEP POINCARÉ MAP: A NOVEL APPROACH FOR LEFT VENTRICLE SEGMENTATION

- Yuanhan Mo, Fangde Liu, Douglas McIlwraith, Guang Yang, **Jingqing Zhang**, Taigang He, and Yike Guo. The 21st International Conference on Medical Image Computing and Computer-Assisted Intervention, MICCAI, 2018.

I2T2I: LEARNING TEXT TO IMAGE SYNTHESIS WITH TEXTUAL DATA AUGMENTATION

- Hao Dong, **Jingqing Zhang**, Douglas McIlwraith, Yike Guo. International Conference on Image Processing, ICIP, 2017.

TENSORDB: DATABASE INFRASTRUCTURE FOR CONTINUOUS MACHINE LEARNING

- Fangde Liu, Axel Oehmichen, **Jingqing Zhang**, Kai Sun, Hao Dong, Yuanhan Mo, and Yik Guo. International Conference Artificial Intelligence, ICAI, 2017.

* Equal contribution.

Projects

TENSORLAYER 2.0

- ~6.1k stars on GitHub. Leading the development of TensorLayer 2.0, a novel TensorFlow-based deep learning and reinforcement learning library designed for researchers and engineers. TensorLayer was

awarded the 2017 Best Open Source Software by the ACM Multimedia Society.

github.com/tensorlayer/tensorlayer

KDDCUP 2019 AUTOML TRACK

- A solution for the KDDCUP 2019 AutoML Track using LightGBM.

Awards & Scholarships

- PhD Scholarship supported by LexisNexis HPCC Systems Academic Program 2016-2020
- National Scholarship of China (top 1%) in 2015
- Tsinghua & Tung OOCL Scholarship (top 10%) in 2014
- Tsinghua & Evergrand Scholarship (top 10%) in 2013

Skills

- Computer skills: Python, C/C++/C#, Java, JavaScript, HTML, CSS, Linux
- Machine Learning Frameworks: TensorFlow 1.0 & 2.0, PyTorch, TensorLayer, Scikit-learn
- GitHub: <https://github.com/lingqingZ>

Updated: 2020-05-10