

Zhijie Deng

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- Contact Information** Phone: (+86) 15600614105
Email: dzj17@mails.tsinghua.edu.cn; dengzhijiethu@gmail.com
- Education**
- Department of Computer Science and Technology 2017.09 -
Tsinghua University, Beijing, China
Ph.D. Student, advised by Prof. Bo Zhang and Prof. Jun Zhu
- Department of Computer Science and Technology 2013.08 - 2017.06
Tsinghua University, Beijing, China
Bachelor of Engineering
GPA: 92/100; Rank: 5/107
- Machine Learning Department 2016.06 - 2016.09
Carnegie Mellon University, Pittsburgh, US
Visiting Student
- Work Experience**
- Research intern** in Video Group, Megvii, Beijing, China 2017.03 - 2017.09
- Research intern** in AI Platform Group, RealAI, Beijing, China 2020.06 -
- Publications**
- Black-box Detection of Backdoor Attacks with Limited Information and Data
Yinpeng Dong, Xiao Yang, **Zhijie Deng**, Tianyu Pang, Zihao Xiao, Hang Su, and Jun Zhu
International Conference on Computer Vision (ICCV), Virtual, 2021
- LiBRE: A Practical Bayesian Approach to Adversarial Detection
Zhijie Deng, Xiao Yang, Shizhen Xu, Hang Su, and Jun Zhu
The Conference on Computer Vision and Pattern Recognition (CVPR), Virtual, 2021
- AutoSync: Learning to Synchronize for Data-Parallel Distributed Deep Learning
Hao Zhang*, Yuan Li*, **Zhijie Deng**, Xiaodan Liang, Lawrence Carin, Eric P. Xing
Advances in Neural Information Processing Systems (NeurIPS), Vancouver, Canada, 2020
- Understanding and Exploring the Network with Stochastic Architectures
Zhijie Deng, Yinpeng Dong, Shifeng Zhang, and Jun Zhu
Advances in Neural Information Processing Systems (NeurIPS), Vancouver, Canada, 2020
- Adversarial Distributional Training for Robust Deep Learning
Zhijie Deng*, Yinpeng Dong*, Tianyu Pang, Hang Su, and Jun Zhu (* indicates equal contribution)
Advances in Neural Information Processing Systems (NeurIPS), Vancouver, Canada, 2020
- Cluster Alignment with a Teacher for Unsupervised Domain Adaptation
Zhijie Deng, Yucen Luo, and Jun Zhu

International Conference on Computer Vision (ICCV), Seoul, Korea, 2019

Cavs: An Efficient Runtime System for Dynamic Neural Networks
Shizhen Xu, Hao Zhang, Graham Neubig, Wei Dai, Jin Kyu Kim, **Zhijie Deng**, Qirong Ho, Guangwen Yang, and Eric P Xing
USENIX Annual Technical Conference (USENIX ATC), Boston, USA, 2018

Structured Generative Adversarial Networks
Zhijie Deng*, Hao Zhang*, Xiaodan Liang, Luona Yang, Shizhen Xu, Jun Zhu, and Eric P Xing (* indicates equal contribution)
Advances in Neural Information Processing Systems (NeurIPS), Long Beach, USA, 2017

Workshops

DBSN: Measuring Uncertainty through Bayesian Learning of Deep Neural Network Structures
Zhijie Deng, Yucen Luo, and Jun Zhu
2nd Workshop on Neural Architecture Search at ICLR 2021

Batch Virtual Adversarial Training for Graph Convolutional Networks
Zhijie Deng, Yinpeng Dong, and Jun Zhu
ICML 2019 Workshop on Learning and Reasoning with Graph-Structured Representation, 2019

Preprints

Deep Ensemble as a Gaussian Process Posterior
Zhijie Deng and Jun Zhu
Draft

Exploring Memorization in Adversarial Training
Yinpeng Dong, Ke Xu, Xiao Yang, Tianyu Pang, **Zhijie Deng**, Hang Su, and Jun Zhu
ArXiv preprint 2106.01606

BayesAdapter: Being Bayesian, Inexpensively and Reliably, via Bayesian Fine-tuning
Zhijie Deng, Hao Zhang, Xiao Yang, Yinpeng Dong, and Jun Zhu
ArXiv preprint 2010.01979

Accurate and Reliable Forecasting using Stochastic Differential Equations
Peng Cui, **Zhijie Deng**, Wenbo Hu, and Jun Zhu
ArXiv preprint 2103.15041

Patents

A method and device for Bayesian structure learning of deep neural networks, 2021 (ZL 2019 1 0912494.3)
Jun Zhu, **Zhijie Deng**, and Bo Zhang

Selected Awards

Huawei-Tsinghua Outstanding Service Award	2021.06
‘84’ Future Innovation Scholarship	2020.12
NVAIL Pioneering Research Award	2017.12
Travel Award of NIPS 2017	2017.12
Tsinghua Good Graduates	2017.06

	Academic Excellence Scholarship of Tsinghua University	2016.12
	Academic Excellence Scholarship of Tsinghua University	2015.12
	Academic Excellence Scholarship of Tsinghua University	2014.12
Services	Conference reviewer: NeurIPS 2019, 2020, 2021; AAAI 2021, 2022; CVPR 2021, 2022; ICML 2021; ICCV 2021; ICLR 2022	
	Journal reviewer: T-ITS, Neural Networks	
	Others: Reviewer for adversarial ML workshop@ICML 2021; PC member for NAS workshop@ICLR 2021	
Teaching	2019 spring, TA in Statistical Machine Learning , instructed by Prof. Jun Zhu	
	2018 fall, TA in Machine Learning , instructed by Prof. Jie Tang and Prof. Jun Zhu	
Computer Skills	Languages: C, C++, Python, Cuda, Matlab	
	Deep Learning Tools: Theano, Tensorflow, Caffe, Pytorch	