## Yinpeng Dong

Department of Computer Science and Technology, Tsinghua University FIT building 1-509, Beijing, China, 100084 http://ml.cs.tsinghua.edu.cn/~yinpeng

Contact Phone: (+86) 18603303421

Information Email: dongyinpeng@mail.tsinghua.edu.cn; dongyinpeng@gmail.com

Work Experience Department of Computer Science and Technology

2022.01 -

Tsinghua University, Beijing, China

Postdoctoral Researcher, collaborated with Prof. Jun Zhu

Research Scientist at RealAI

2021.06 -

**Education** Department of Computer Science and Technology

2017.09 - 2022.01

Tsinghua University, Beijing, China **Ph.D**, advised by Prof. Jun Zhu

Department of Computer Science and Technology

2013.08 - 2017.06

Tsinghua University, Beijing, China

Bachelor of Engineering *GPA*: 94.4/100; *Rank*: 2/107

Robotic Institute 2016.06 - 2016.09

Carnegie Mellon University, Pittsburgh, US

Visiting Student

Department of Electrical Engineering and Computer Science 2015.06 - 2015.07

National Tsing Hua University, Hsinchu, Taiwan

**Exchange Student** 

Computer Skills Languages: C, C++, Python, Cuda.

Mathematical Computation: Matlab.

Deep Learning Tools: Tensorflow, Pytorch.

Operating Systems: Linux, Mac OSX, Windows.

**Publications** 

(\* indicates equal contribution)

Exploring Memorization in Adversarial Training

Yinpeng Dong, Ke Xu, Xiao Yang, Tianyu Pang, Zhijie Deng, Hang Su, and Jun

Zhu

International Conference on Learning Representations (ICLR), 2022

Query-Efficient Black-box Adversarial Attacks Guided by a Transfer-based Prior

Yinpeng Dong\*, Shuyu Cheng\*, Tianyu Pang, Hang Su, and Jun Zhu

IEEE Transaction on Pattern Analysis and Machine Intelligence (TPAMI), 2021

Accumulative Poisoning Attacks on Real-time Data

Tianyu Pang, Xiao Yang, **Yinpeng Dong**, Hang Su, and Jun Zhu Advances in Neural Information Processing Systems (NeurIPS), 2021

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), 2021

Towards Face Encryption by Generating Adversarial Identity Masks Xiao Yang, **Yinpeng Dong**, Tianyu Pang, Hang Su, Jun Zhu, Yuefeng Chen, and Hui Xue

International Conference on Computer Vision (ICCV), 2021

Improving Transferability of Adversarial Patches on Face Recognition with Generative Models

Zihao Xiao, Xianfeng Gao, Chilin Fu, **Yinpeng Dong**, Wei Gao, Xiaolu Zhang, Jun Zhou, and Jun Zhu

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021

Bag of Tricks for Adversarial Training

Tianyu Pang, Xiao Yang, **Yinpeng Dong**, Hang Su, Jun Zhu International Conference on Learning Representations (ICLR), 2021

Adversarial Distributional Training for Robust Deep Learning Yinpeng Dong\*, Zhijie Deng\*, Tianyu Pang, Hang Su, and Jun Zhu Advances in Neural Information Processing Systems (NeurIPS), 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), 2020

Boosting Adversarial Training with Hypersphere Embedding Tianyu Pang\*, Xiao Yang\*, **Yinpeng Dong**, Kun Xu, Hang Su, and Jun Zhu Advances in Neural Information Processing Systems (NeurIPS), 2020

Benchmarking Adversarial Robustness on Image Classification (Oral)
Yinpeng Dong, Qi-An Fu, Xiao Yang, Tianyu Pang, Hang Su, Zihao Xiao, and Jun Zhu

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020

Rethinking Softmax Cross-Entropy Loss for Adversarial Robustness Tianyu Pang, Kun Xu, **Yinpeng Dong**, Chao Du, Ning Chen, and Jun Zhu International Conference on Learning Representations (ICLR), 2020

Improving Black-box Adversarial Attacks with a Transfer-based Prior Shuyu Cheng\*, **Yinpeng Dong\***, Tianyu Pang, Hang Su, and Jun Zhu Advances in Neural Information Processing Systems (NeurIPS), 2019

Evading Defenses to Transferable Adversarial Examples by Translation-Invariant Attacks (Oral)

Yinpeng Dong, Tianyu Pang, Hang Su, and Jun Zhu IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019

Efficient Decision-based Black-box Adversarial Attacks on Face Recognition **Yinpeng Dong**, Hang Su, Baoyuan Wu, Zhifeng Li, Wei Liu, Tong Zhang, and Jun Zhu

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019

Stochastic Quantization for Learning Accurate Low-bit Deep Neural Networks

**Yinpeng Dong**, Renkun Ni, Jianguo Li, Yurong Chen, Hang Su, and Jun Zhu International Journal of Computer Vision (IJCV), 2019

Composite Binary Decomposition Networks

You Qiaoben, Zheng Wang, Jianguo Li, **Yinpeng Dong**, Yu-Gang Jiang, and Jun Zhu

The Thirty-Third AAAI Conference on Artificial Intelligence (AAAI), 2019

Towards Robust Detection of Adversarial Examples (**Spotlight**)
Tianyu Pang, Chao Du, **Yinpeng Dong**, and Jun Zhu
Advances in Neural Information Processing Systems (NeurIPS), 2018

Boosting Adversarial Attacks with Momentum (Spotlight)

**Yinpeng Dong**, Fangzhou Liao, Tianyu Pang, Hang Su, Jun Zhu, Xiaolin Hu, and Jianguo Li

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018

Defense against Adversarial Attacks Using High-Level Representation Guided Denoiser Fangzhou Liao\*, Ming Liang\*, **Yinpeng Dong**, Tianyu Pang, Jun Zhu, and Xiaolin Hu

IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2018

Learning Visual Knowledge Memory Networks for Visual Question Answering Zhou Su, Chen Zhu, **Yinpeng Dong**, Dongqi Cai, Yurong Chen, and Jianguo Li *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2018

Learning Accurate Low-Bit Deep Neural Networks with Stochastic Quantization (Oral, Best Paper Nomination)

**Yinpeng Dong**, Renkun Ni, Jianguo Li, Yurong Chen, Jun Zhu, and Hang Su British Machine Vision Conference (BMVC), 2017

Forecast Plausible Paths in Crowd Scenes Hang Su, Jun Zhu, **Yinpeng Dong**, and Bo Zhang International Joint Conference on Artificial Intelligence (IJCAI), 2017

Improving Interpretability of Deep Neural Networks with Semantic Information **Yinpeng Dong**, Hang Su, Jun Zhu, and Bo Zhang *IEEE Conference on Computer Vision and Pattern Recognition (CVPR)*, 2017

Efficient and Robust Semi-supervised Learning over a Sparse-Regularized Graph Hang Su, Jun Zhu, Zhaozheng Yin, **Yinpeng Dong**, and Bo Zhang European Conference on Computer Vision (ECCV), 2016

Crowd Scene Understanding with Coherent Recurrent Neural Networks Hang Su, **Yinpeng Dong**, Jun Zhu, Haibin Ling, and Bo Zhang International Joint Conference on Artificial Intelligence (IJCAI), 2016

# Preprints & Workshops

Adversarial Vision Challenge

Wieland Brendel, Jonas Rauber, Alexey Kurakin, Nicolas Papernot, Behar Veliqi, Sharada P. Mohanty, Florian Laurent, Marcel Salathé, Matthias Bethge, Yaodong Yu, Hongyang Zhang, Susu Xu, Hongbao Zhang, Pengtao Xie, Eric P. Xing, Thomas Brunner, Frederik Diehl, Jérôme Rony, Luiz Gustavo Hafemann, Shuyu Cheng, **Yinpeng Dong**, Xuefei Ning, Wenshuo Li, Yu Wang NeurIPS 2018 Competition Chapter, 2019

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

Towards Interpretable Deep Neural Networks by Leveraging Adversarial Examples **Yinpeng Dong**, Hang Su, Jun Zhu, Fan Bao, and Bo Zhang AAAI 2019 Workshop on Network Interpretability for Deep Learning, 2019

Adversarial Attacks and Defences Competition

Alexey Kurakin, Ian Goodfellow, Samy Bengio, **Yinpeng Dong**, Fangzhou Liao, Ming Liang, Tianyu Pang, Jun Zhu, Xiaolin Hu, et al. *NeurIPS 2017 Competition Chapter*, 2018

Feature Engineering and Ensemble Modeling for Paper Acceptance Rank Prediction Yujie Qian\*, **Yinpeng Dong\***, Ye Ma\*, Hailong Jin, and Juanzi Li *KDD Workshop KDDCUP*, 2016

The 2nd places in Targeted Attack track, Defense track, and the 3rd place

2018.9

in Non-targeted Attack track of GeekPwn CAAD competition

	•	
Selected Awards	Shuimu Tsinghua Scholar Program	2022.01
	Beijing Outstanding Graduates	2022.01
	ByteDance Scholars Program	2020.11
	Tsinghua-HUAWEI Scholarship	2020.10
	Baidu Fellowship	2020.01
	'84' Future Innovation Scholarship	2019.12
	Microsoft Research Asia (MSRA) Fellowship	2019.11
	China National Scholarship	2019.10
	VALSE Annual Outstanding Student Paper Award	2019.04
	CCF-CV Academic Emerging Award	2018.11
	China National Scholarship	2018.10
	Tsinghua University Future PhD Fellowship	2017.09
Challenges	The 1st palce in GeekPwn DeepFake competition (Shanghai)	2020.10
	The 1st palces in GeekPwn CAAD CTF and Adversarial Patch competitions (Shanghai) $2019.10$	
	The 2nd place in the Untargeted Attack track of NeurIPS 2018 Adv Vision Challenge	ersarial 2018.11

The 1st palce in GeekPwn CAAD CTF competition (Las Vegas) 2018.8

The 1st places in NeurIPS 2017 Adversarial Attacks and Defenses 2017.10

The 2nd place in KDDCUP 2016

2016.7

#### Services

## Organizer for:

**AAAI 2022 Workshop** on Adversarial Machine Learning and Beyond **ICML 2021 Workshop** on A Blessing in Disguise: The Prospects and Perils of Adversarial Machine Learning

ICCV 2021 Workshop on Adversarial Robustness in the Real World CVPR 2021 Workshop on Adversarial Machine Learning in Real-World Computer Vision Systems and Online Challenges (AML-CV)

### Reviewer for:

TPAMI 2019, 2020, 2021, 2022 IJCV 2021, 2022 TIP 2019, 2020, 2021 TNNLS 2019, 2020 NeurIPS 2016, 2019, 2020, 2021 ICML 2019, 2021, 2022 CVPR 2019, 2020, 2021, 2022 ICLR 2020, 2021, 2022 ICCV 2019, 2021 ECCV 2020 AAAI 2019, 2020, 2021 IJCAI 2019, 2020

Teaching

2019 Spring, **Head TA** in *Statistical Machine Learning*, instructed by Prof. Jun Zhu