# **Zinan Lin**

4720 Forbes Avenue, CIC 2119B – Pittsburgh, PA 15213 – USA

# **Education**

Carnegie Mellon University  Ph.D. Candidate, Department of Electrical and Computer Engineering  Advisors: Giulia Fanti and Vyas Sekar  Grade: 4.0/4.0 (10 courses, all with 4.0/4.0)	Pittsburgh, PA, USA 2017-Present
<b>Tsinghua University</b> Bachelor of Engineering, Department of Electronic Engineering Grade: 92/100. Rank: 5/195	<b>Beijing, China</b> 2013–2017
Honors and Awards	
Top Reviewers in ICML 2020	2020
Cylab Presidential Fellowship, granted by Carnegie Mellon University	2020
Siemens FutureMakers Fellowship, granted by Siemens	2019
Best Reviewers (Top 400) in NeurIPS 2019, https://nips.cc/Confer	ences/2019/Reviewers 2019
NeurIPS Spotlight, with Kiran Thekumparampil, Ashish Khetan, and S	Sewoong Oh 2018
Presidential Fellowship, granted by Carnegie Mellon University	2017
Carnegie Institute of Technology Dean's Fellow, granted by Carnegie	ie Mellon University 2017
Outstanding Bachelor Thesis, granted by Tsinghua University	2017
Meritorious Winner, COMAP's Mathematical Contest in Modeling	2015, 2016, 2017
National Scholarship, granted by the government of China	2014, 2015, 2016
The First Prize, National Physics Contest for College Student	2014
The Second Prize, National Mathematic Contest in Beijing Province	2014
Experience	
Google (Research Intern)	Mountain View, CA, USA
Host: Yundi Qian	May 2020-Aug. 2020
Topic: Compiler Optimizations with Reinforcement Learning	
Carnegie Mellon University (Graduate Research Assistant)	Pittsburgh, PA, USA
Advisors: Giulia Fanti, Vyas Sekar, Sewoong Oh Topic: Generative Adversarial Networks	Sep. 2017-Present

## Tsinghua University (Research Assistant)

Beijing, China

Advisor: Yongfeng Huang Dec. 2016–Jun. 2017

Topic: Fast Steganalysis of VoIP Streams Using Recurrent Neural Network (Bachelor Thesis)

University of California, Santa Barbara (Research Assistant)

Santa Barbara, CA, USA

Advisor: Ben Zhao Jun. 2016–Sep. 2016

Topic: Large Scale Automatic Sybil Attacks and Vulnerability Measurement on Mobile Services

#### Microsoft Research Asia (Research Intern)

Beijing, China

Managers: Fei Gao, Taifeng Wang

Mar. 2017-Jun. 2017

o Performed a large-scale empirical study of optimization methods on various benchmark datasets.

### Luogu Website (Cofounder and Developer)

China

www.luogu.org

2013-Present

o One of the biggest online judges in China.

#### Skills

Programming Languages....

C, C++, Python, Java, (Visual) Basic, Pascal, Haskell, MATLAB, Mathematica, PHP, JavaScript, HTML, CSS, SQL, Verilog, Assembly, bash, shell, LATEX, etc.

Machine Learning Frameworks....

TensorFlow, PyTorch, Theano, Keras, Blocks, CNTK, etc.

## **Teaching Assistant**

#### CMU 18752: Estimation, Detection and Learning

Pittsburgh, PA, USA

Instructor: Rohit Negi

Spring 2020

#### **Publications**

- [1] **Zinan Lin**, Alankar Jain, Chen Wang, Giulia Fanti, and Vyas Sekar. "Using GANs for Sharing Networked Timeseries Data: Challenges, Initial Promise, and Open Questions". In: *Proceedings of the Internet Measurement Conference (IMC)* (2020).
- [2] **Zinan Lin**, Kiran Koshy Thekumparampil, Giulia Fanti, and Sewoong Oh. "InfoGAN-CR and ModelCentrality: Self-supervised Model Training and Selection for Disentangling GANs". In: *Proceedings of Machine Learning and Systems (ICML)*. 2020, pp. 7775–7786.
- [3] **Zinan Lin**, Ashish Khetan, Giulia Fanti, and Sewoong Oh. "PacGAN: The Power of Two Samples in Generative Adversarial Networks". In: *IEEE Journal on Selected Areas in Information Theory* 1.1 (2020), pp. 324–335.
- [4] **Zinan Lin**, Vyas Sekar, and Giulia Fanti. "Why Spectral Normalization Stabilizes GANs: Analysis and Improvements". In: *arXiv e-prints*. 2020.
- [5] **Zinan Lin**, Soo-Jin Moon, Carolina M. Zarate, Ritika Mulagalapalli, Sekar Kulandaivel, Giulia Fanti, and Vyas Sekar. "Towards Oblivious Network Analysis using Generative Adversarial Networks".

- In: *Proceedings of the 18th ACM Workshop on Hot Topics in Networks* (*HotNets*). ACM. 2019. URL: https://dl.acm.org/citation.cfm?id=3365854.
- [6] Zinan Lin, Ashish Khetan, Giulia Fanti, and Sewoong Oh. "PacGAN: The Power of Two Samples in Generative Adversarial Networks". In: Advances in Neural Information Processing Systems (NeurIPS). 2018, pp. 1498–1507. URL: http://papers.nips.cc/paper/7423-pacgan-the-power-of-two-samples-in-generative-adversarial-networks.
- [7] Kiran K Thekumparampil, Ashish Khetan, Zinan Lin, and Sewoong Oh. "Robustness of Conditional GANs to Noisy Labels". In: Advances in Neural Information Processing Systems (NeurIPS). 2018, pp. 10271–10282. URL: http://papers.nips.cc/paper/8229-robustness-of-conditional-gans-to-noisy-labels.
- [8] **Zinan Lin**, Yongfeng Huang, and Jilong Wang. "RNN-SM: Fast Steganalysis of VoIP Streams Using Recurrent Neural Network". In: *IEEE Transactions on Information Forensics and Security* 13.7 (July 2018), pp. 1854–1868. ISSN: 1556-6013. DOI: 10.1109/TIFS.2018.2806741. URL: http://ieeexplore.ieee.org/document/8292900/.