

Presentation Paper List - CS583 Section B

1. Unbiased Gradient Estimation In Unrolled Computation Graphs With Persistent Evolution

Paul Vicol, Luke Metz and Jascha Sohl-Dickstein

<https://proceedings.mlr.press/v139/vicol21a.html>

2. Oops I took a gradient: Scalable sampling for discrete distributions

Will Grathwohl, Kevin Swersky, Milad Hashemi, David Duvenaud and Chris J. Maddison

<https://arxiv.org/abs/2102.04509>

3. Optimal complexity in decentralised training

Yucheng Lu and Christopher De Sa

<https://arxiv.org/abs/2006.08085>

4. Understanding self-supervised learning dynamics without contrastive pairs

Yuandong Tian, Xinlei Chen, and Surya Ganguli

<https://arxiv.org/abs/2102.06810>

5. Solving high-dimensional parabolic PDEs using the tensor train format

Lorenz Richter, Leon Sallandt, and Nikolas Nüsken

<https://arxiv.org/abs/2102.11830>

6. No-Regret Learning Dynamics for Extensive-Form Correlated Equilibrium.

Andrea Celli, Alberto Marchesi, Gabriele Farina, Nicola Gatti

<https://arxiv.org/abs/2004.00603>

7. Improved Guarantees and a Multiple-Descent Curve for Column Subset Selection and the Nyström Method.

Michał Dereziński, Rajiv Khanna, Michael W. Mahoney

<https://arxiv.org/abs/2002.09073>

8. Language Models are Few-Shot Learners.

Tom B. Brown, Benjamin Mann, Nick Ryder, Melanie Subbiah, Jared Kaplan,
Prafulla Dhariwal, Arvind Neelakantan, Pranav Shyam, Girish Sastry, Amanda
Askell, Sandhini Agarwal, Ariel Herbert-Voss, Gretchen Krueger, Tom Henighan,
Rewon Child, Aditya Ramesh, Daniel M. Ziegler, Jeffrey Wu, Clemens Winter,
Christopher Hesse, Mark Chen, Eric Sigler, Mateusz Litwin, Scott Gray, Benjamin
Chess, Jack Clark, Christopher Berner, Sam McCandlish, Alec Radford, Ilya
Sutskever, Dario Amodei
<https://arxiv.org/abs/2005.14165>

9. Distribution-Independent PAC Learning of Halfspaces with Massart Noise
Ilias Diakonikolas, Themis Gouleakis, Christos Tzamos
<https://arxiv.org/abs/1906.10075>

10. Uniform convergence may be unable to explain generalization in deep learning
Authors: Vaishnavh Nagarajan, J. Zico Kolter
<https://arxiv.org/abs/1902.04742>

11. Nonparametric Density Estimation & Convergence Rates for GANs under Besov
IPM Losses
Ananya Uppal, Shashank Singh, Barnabás Póczos
<https://arxiv.org/abs/1902.03511>

12. Fast and Accurate Least-Mean-Squares Solvers
Alaa Maalouf, Ibrahim Jubran, Dan Feldman
<https://arxiv.org/abs/1906.04705>

13. Putting An End to End-to-End: Gradient-Isolated Learning of Representations
Sindy Löwe, Peter O'Connor, Bastiaan S. Veeling
<https://arxiv.org/abs/1905.11786>

14. Continuous 3D-Structure-Aware Neural Scene Representations
Vincent Sitzmann, Michael Zollhöfer, Gordon Wetzstein
<https://arxiv.org/abs/1906.01618>

15. On Learning Sets of Symmetric Elements

Haggai Maron, Or Litany, Gal Chechik, Ethan Fetaya

<https://arxiv.org/abs/2002.08599>

16. Tuning-free Plug-and-Play Proximal Algorithm for Inverse Imaging Problems

Kaixuan Wei, Angelica I Aviles-Rivero, Jingwei Liang, Ying Fu, Carola-Bibiane Schönlieb, Hua Huang

<https://arxiv.org/abs/2002.09611>

17. Efficiently sampling functions from Gaussian process posteriors

James Wilson, Slava Borovitskiy, Alexander Terenin, Peter Mostowsky, Marc Deisenroth

<https://arxiv.org/abs/2002.09309>

18. Generative Pretraining From Pixels

Mark Chen, Alec Radford, Rewon Child, Jeffrey K Wu, Heewoo Jun, David Luan, Ilya Sutskever

https://cdn.openai.com/papers/Generative_Pretraining_from_Pixels_V2.pdf

19. Dual Averaging Method for Regularized Stochastic Learning and Online Optimization

Lin Xiao

<https://www.jmlr.org/papers/v11/xiao10a.html>

20. Video-aided Unsupervised Grammar Induction

Songyang Zhang, Linfeng Song, Lifeng Jin, Kun Xu, Dong Yu and Jiebo Luo

<https://arxiv.org/abs/2104.04369>

21. Unifying Cross-Lingual Semantic Role Labeling with Heterogeneous Linguistic Resources

Simone Conia, Andrea Bacciu and Roberto Navigli

<https://www.semanticscholar.org/paper/Unifying-Cross-Lingual-Semantic-Role-Labeling-with-Conia-Bacciu/2172c289b97e4d709f1c54683a242ce9a4c2f37c>

22. It's Not Just Size That Matters: Small Language Models Are Also Few-Shot Learners

Timo Schick and Hinrich Schütze

<https://arxiv.org/abs/2009.07118>

23. Beyond Accuracy: Behavioral Testing of NLP Models with CheckList
Marco Tulio Ribeiro, Tongshuang Wu, Carlos Guestrin and Sameer Singh

<https://arxiv.org/abs/2005.04118>

24. Don't Stop Pretraining: Adapt Language Models to Domains and Tasks
Suchin Gururangan, Ana Marasović, Swabha Swayamdipta, Kyle Lo, Iz Beltagy, Doug Downey and Noah A. Smith

25. Tangled up in BLEU: Reevaluating the Evaluation of Automatic Machine Translation Evaluation Metrics

Nitika Mathur, Timothy Baldwin and Trevor Cohn

<https://arxiv.org/abs/2004.10964>

26. Attention Is All You Need

Ashish Vaswani, Noam Shazeer, Niki Parmar, Jakob Uszkoreit, Llion Jones, Aidan N. Gomez, Lukasz Kaiser, Illia Polosukhin

<https://arxiv.org/abs/1706.03762>

27. How Can We Accelerate Progress Towards Human-like Linguistic Generalization?

Tal Linzen

<https://arxiv.org/abs/2005.00955>

28. A Unified Approach to Interpreting Model Predictions

Scott Lundberg, Su-In Lee

<https://arxiv.org/abs/1705.07874>

29. Informer: Beyond Efficient Transformer for Long Sequence Time-Series Forecasting

Haoyi Zhou, Shanghang Zhang, Jieqi Peng, Shuai Zhang, Jianxin Li, Hui Xiong, Wancai Zhang

<https://arxiv.org/abs/2012.07436>

30. Exploration-Exploitation in Multi-Agent Learning: Catastrophe Theory Meets Game Theory

Stefanos Leonardos, Georgios Piliouras
<https://arxiv.org/abs/2012.03083>

31. Learning from eXtreme Bandit Feedback
Romain Lopez, Inderjit S. Dhillon, Michael Jordan
<https://arxiv.org/abs/2009.12947>

32. Self-Attention Attribution: Interpreting Information Interactions Inside Transformer
Yaru Hao, Li Dong, Furu Wei, Ke Xu
<https://arxiv.org/abs/2004.11207>

33. Mitigating Political Bias in Language Models through Reinforced Calibration
Ruibo Liu, Chenyan Jia, Jason W Wei, Guangxuan Xu, Lili Wang, Soroush Vosoughi
<https://arxiv.org/abs/2104.14795>

34. Fair Division of Mixed Divisible and Indivisible Goods
[Xiaohui Bei](#), [Zihao Li](#), [Jinyan Liu](#), [Shengxin Liu](#), [Xinhang Lu](#)
<https://arxiv.org/abs/1911.07048>

35. Lifelong Learning with a Changing Action Set
Yash Chandak, [Georgios Theodorou](#), [Chris Not](#), [Philip S. Thomas](#)
<https://arxiv.org/abs/1906.01770>

36. Unsupervised Data Augmentation For Consistency Training.
[Qizhe Xie](#), [Zihang Dai](#), [Eduard Hovy](#), [Minh-Thang Luong](#), [Quoc V. Le](#)
<https://arxiv.org/abs/1904.12848>

37. RandAugment: Practical Automated Data Augmentation With A Reduced Search Space.
[Ekin D. Cubuk](#), [Barret Zoph](#), [Jonathon Shlens](#), [Quoc V. Le](#)
<https://arxiv.org/abs/1909.13719>

38. On Adaptive Attacks To Adversarial Example Defenses
[Florian Tramèr](#), [Nicholas Carlini](#), [Wieland Brendel](#), [Aleksander Madry](#)
<https://arxiv.org/abs/2002.08347>

39. Big Self-Supervised Models Are Strong Semi-Supervised Learners

Ting Chen, Simon Kornblith, Kevin Swersky, Mohammad Norouzi, Geoffrey Hinton

<https://arxiv.org/abs/2006.10029>

40. XLNet: Generalized Autoregressive Pretraining For Language Understanding

Zhilin Yang, Zihang Dai, Yiming Yang, Jaime Carbonell, Ruslan Salakhutdinov, Quoc V. Le

<https://arxiv.org/abs/1906.08237>

41. Cross-lingual Language Model Pretraining

Guillaume Lample, Alexis Conneau

<https://arxiv.org/abs/1901.07291>