

## Chung-Yiu Yau

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3<sup>rd</sup> Year Ph.D. student, The Chinese University of Hong Kong  
Email: [cyau@se.cuhk.edu.hk](mailto:cyau@se.cuhk.edu.hk)    Webpage: <https://oscaryau525.github.io/>

<b>RESEARCH INTERESTS</b>	My Ph.D. research focuses on distributed and decentralized optimization in machine learning and deep learning.	
<b>EDUCATION</b>	<i>Ph.D. System Engineering and Engineering Management</i>	2021 - Present
	<a href="#">The Chinese University of Hong Kong</a> , Hong Kong <ul style="list-style-type: none"><li>◇ Research in Distributed Optimization under supervision of <a href="#">Prof. Hoi-To Wai</a>.</li><li>◇ Analyze the convergence of novel decentralized optimization algorithms, such as gradient tracking algorithm with compressed communication and time-varying graph.</li></ul>	
<b>SELECTED AWARDS</b>	<i>B.Sc. Computer Science (First Class Honour, ELITE Stream)</i>	2017 - 2021
	<a href="#">The Chinese University of Hong Kong</a> , Hong Kong	
<b>TEACHING ASSISTANT</b>	◇ ELITE Stream Student Scholarship 2020-21, 2019-20, 2017-18, Faculty of Engineering, CUHK.	
	◇ College Head's List 2020/21, Shaw College, CUHK.	
	◇ Dean's List, 2019/20, Faculty of Engineering, CUHK.	
	◇ Ms. Wong Wai-ling Scholarships 2017/18, Shaw College, CUHK.	
<b>RESEARCH PUBLICATION</b>	<i>Department of Systems Engineering and Engineering Management, Faculty of Engineering, The Chinese University of Hong Kong</i>	
	◇ ENGG2440 Discrete Mathematics for Engineers (2021/22 - 2023/24) ◇ FTEC2101 Optimization Methods (2021/22 - 2023/24)	
<b>RESEARCH PUBLICATION</b>	[1] Chung-Yiu Yau, Hoi-To Wai, Parameswaran Raman, Soumajyoti Sarkar, and Mingyi Hong. Emc <sup>2</sup> : Efficient mcmc negative sampling for contrastive learning with global convergence. 2024.	
	[2] Chung-Yiu Yau and Hoi-To Wai. Fully stochastic distributed convex optimization on time-varying graph with compression. In <i>2023 62nd IEEE Conference on Decision and Control (CDC)</i> , pages 145–150. IEEE, 2023.	
	[3] Xiaolu Wang, Chung-Yiu Yau, and Hoi-To Wai. Network effects in performative prediction games. In <i>International Conference on Machine Learning</i> , pages 36514–36540. PMLR, 2023.	
	[4] Chung-Yiu Yau and Hoi-To Wai. Docom: Compressed decentralized optimization with near-optimal sample complexity. <i>Transactions on Machine Learning Research</i> , 2023.	
	[5] Bingqing Song, Ioannis Tsaknakis, Chung-Yiu Yau, Hoi-To Wai, and Mingyi Hong. Distributed Optimization for Overparameterized Problems: Achieving Optimal Dimension Independent Communication Complexity. <i>Advances in Neural Information Processing Systems</i> , 2022.	

- [6] Qiang Li, Chung-Yiu Yau, and Hoi-To Wai. Multi-agent Performative Prediction with Greedy Deployment and Consensus Seeking Agents. *Advances in Neural Information Processing Systems*, 2022.
- [7] Chung-Yiu Yau, Haoli Bai, Irwin King, and Michael R Lyu. DAP-BERT: Differentiable Architecture Pruning of BERT. In *International Conference on Neural Information Processing*, pages 367–378. Springer, 2021.