Curriculum Vitae

Personal Information:

Name:	Chen Liang	**Marriage Status:**	Married
Gender:	Male	**Cell Phone:**	(+86)13380319709
Date of Birth:	Jan.,1983	**Email:**	leoncuhk@gmail.com

Education:

2009 - 2013   PhD, Information Engineering, The Chinese University of Hong Kong

2006 - 2009   MPhil, Information Engineering, The Chinese University of Hong Kong

2001 - 2006   Bachelor of Science in System Science and Engineering

Bachelor of Science in Electronic Information Engineering

College of Information Science and Engineering, Zhejiang University, (Overall GPA: 3.72/4.0, Major GPA: 3.93/4.0)

Working Experience:

▪ 2017-present: Senior Expert (T13 Leader), Tencent FinTech

▪ 2014-2017: Assistant Professor, College of Information Engineering, Shenzhen University

▪ 2016-2017: Data Scientist at Fengshen Co., Guangzhou

▪ 2012-2015: Research consultant at Tencent

▪ 2013-2014: Postdoctoral fellow in the Dept. of Information Engineering of CUHK

▪ 2012-2013: Research assistant at Institute of Network Coding of CUHK

Project Experience:

▪ 2017-present: Algorithmic marketing, algorithmic decision-making & trading in Fintech

▪ 2016-2017: Computational advertising based on reinforcement learning

▪ 2014-2016: DNN based mobile online video recommendation

▪ 2012-2016: User behavior study in online services based on data analytics

▪ 2012-2014: Data-driven analysis for intelligent networking

▪ 2011-2013: Large-scale measurement and system optimization

Activity:

▪ 2015-2018: NSFC Founding of China (61502315)

▪ 2015-2018: Nature Science Foundation of Guangdong Province

▪ 2015-2020: The Recruitment Program of Global Experts (Kongque Program C)

▪ 2015-2017: Tencent "Rhinoceros Birds" - Scientific Research Foundation

▪ 2013: Sigcomm2013 – Hong Kong, conference organizer

▪ 2011: ITF Founding of Hong Kong (ITS/255/11)

▪ 2010: Visiting Scholar at Tsinghua University, Computer Science and Technology

▪ 2010: IETF 79 – Beijing, NOC assistant

Skills/Qualifications:

Familiar areas include data analytics, online recommendations and deep neural networks.
Skillful in program languages such as Python, R, SQL, Perl, PHP, JS, C and Matlab.

Trained in IBM AIX, DB2, and Google Analytics.

National Computer Rank Examination Band 4.

Skilled in PyTorch and Tensorflow for deep learning, and Spark for big data process.

Publications:

[1] Treatment-Aware Hyperbolic Representation Learning for Causal Effect Estimation with Social Networks[C]. SDM 2024

[2] Towards Hybrid-grained Feature Interaction Selection for Deep Sparse Network[C]. NeurIPS 2023

[3] Expected Transaction Value Optimization for Precise Marketing in FinTech Platforms[C]. ACM RecSys 2023

[4] Prior-Guided Accuracy-Bias Tradeoff Learning for CTR Prediction in Multimedia Recommendation[C]. ACM MM 2023

[5] Curriculum Modeling the Dependence among Targets with Multi-task Learning for Financial Marketing[C]. ACM SigIR 2023

[6] Optimizing Feature Set for Click-Through Rate Prediction[C]. ACM WWW 2023

[7] Self-Sampling Training and Evaluation for the Accuracy-Bias Tradeoff in Recommendation[C]. DASFAA 2023

[8] Deep Reinforcement Learning with Spatio-temporal Traffic Forecasting for Data-Driven Base Station Sleep Control[J]. IEEE Transactions on Network (ToN), 2021

[9] GAIN: Graph Attention & Interaction Network for Inductive Semi-Supervised Learning over Large-scale Graphs[J]. IEEE Transactions on Knowledge and Data Engineering (TKDE), 2020

[10] Identifying User Relationship on WeChat Money-Gifting Network[J]. IEEE Transactions on Knowledge and Data Engineering (TKDE), 2020

[11] DeepCP: Deep Learning Driven Cascade Prediction Based Autonomous Content Placement in Closed Social Network[J]. IEEE Journal on Selected Areas in Communications (JSAC), 2020

[12] Mobile Social Data Learning for User-Centric Location Prediction with Application in Mobile Edge Service Migration[J]. IEEE Internet of Things Journal (IoTJ), 2019

[13] Information Cascades over Diffusion-Restricted Social Network: A Data-Driven Analysis[C], INFOCOM Workshop 2019

[14] User-Centric Location Prediction in Mobile Social Networks: A Factor Graph Learning Approach[C]. IEEE Globecom 2018

[15] WeChat Toxic Article Detection: A Data-Driven Machine Learning Approach[C]. APSIPA ASC 2018.

[16] On Carrier Sensing Accuracy and Range Scaling Laws in Nakagami Fading Channels[J], Wireless Communications and Mobile Computing, 2017

[17] Stalling Assessment for Wireless Online Video Streams via ISP Traffic Monitoring[C], IEEE Wireless Communications and Networking Conference (WCNC). 2017

[18] An Incentive-Based Mixed QoE Framework for Content Delivery to Smart Homes[C], IEEE International Conference on Computer Communication and Networks (ICCCN), 2017

[19] Design, Implementation and Measurement of a Crowdsourcing-based Content Distribution Platform[J]. ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM), 2016

[20] Performance Analysis of Thunder Crystal: A Crowdsourcing-based Video Distribution Platform[J]. IEEE Transactions on Circuits and Systems for Video Technology (TCSVT), 2016

[21] Social-group-based ranking algorithms for cold-start video recommendation, International Journal of Data Science and Analytics[C], 2016.

[22] Social Group Based Video Recommendation Addressing the Cold-Start Problem[C]. PAKDD 2016.

[23] Smart Streaming for Online Video Services[J]. IEEE Transactions on Multimedia (TMM), 2015, 17(4): 1-13.

[24] Analysis and Detection of Fake Views in Online Video Services[J]. ACM Trans. Multimedia Comput. Commun. Appl. (TOMM), 2015, 11(2s): 1-20.

[25] Video Popularity Dynamics and its Implication for Replication[J]. IEEE Transactions on Multimedia (TMM), 2015: 1-12.

[26] Turbocharged Video Distribution via P2P[J]. IEEE Transactions on Circuits and Systems for Video Technology (TCSVT), 2015, 25(2): 287-299.

[27] Thunder Crystal: A Novel Crowdsourcing-based Content Distribution Platform[C]. Proceedings of ACM NOSSDAV, 2015: 13-18.

[28] Distributing Very-large Content from Cloud to Smart Home Hubs: Measurement and Implications[C]. IEEE International Conference on Communications (ICC), 2015.

[29] DST: Leveraging Delay-insensitive Workload in Cloud Storage for Smart Home Network[C], IEEE International Conference on Computer Communication and Networks (ICCCN), 2015: 1–8.

[30] A Study of User Behavior in Online VoD Services[J]. Computer Communications, 2014, 46: 66-75.

[31] Fake View Analytics in Online Video Services[C] (**top 5% paper**). Proceedings of ACM NOSSDAV, 2014: 1-6.

[32] A Lifetime Model of Online Video Popularity[C]. 23rd International Conference on Computer Communication and Networks (ICCCN), 2014: 1-8.

[33] Video Browsing - A Study of User Behavior in Online VoD Services[C] (**top 5% paper**). IEEE International Conference on Computer Communications and Networks (ICCCN), 2013: 1-7.

[34] From ISP address announcement patterns to routing scalability[C], ACM Passive and Active Measurement Conference and Traffic Monitoring and Analysis workshop: Springer, 2012: 43-47.

[35] Analyzing Streaming Performance in Crowdsourcing-based Video Service Systems[C]. IEEE International Symposium on Local and Metropolitan Area Networks (LANMAN) 2015.

[36] Batching for Smart Home: Leveraging Delay-insensitive Workload in Cloud Storage[C]. IEEE International Conference on COMmunication Systems & NETworks (COMSNETS) 2015.

[37] A measurement study of the potential benefits for peer-assisted mobile VoD[C]. IEEE International Wireless Communications and Mobile Computing Conference (IWCMC), 2014: 642-647.

[38] Distributed and optimal reduced primal-dual algorithm for uplink OFDM resource allocation[C]. Proceedings of the 48th IEEE Conference on Decision and Control (CDC) 2009: 4814-4819.

[39] Collective behavior of an anisotropic swarm model based on unbounded repulsion in social potential fields, Computational Intelligence and Bioinformatics: Springer, 2006: 164-173.

[40] DNN based mobile online video recommendation[J]. Chinese Journal of Computers, 2016.

[41] Deep belief networks-based popularity prediction for online video services[J]. Computer Engineering and Applications, 2016.

[42] Research on Video Streaming Bandwidth Allocation for User Previewing Behaviors[J]. Journals of Chinese Computer Systems, 2014 (05): 1027-1030.

Thesis:

PhD Thesis: User Behavior and Resource Allocation in Online Video Service (work at CUHK)

MPhil Thesis: TFRC Modeling and its Applications (work at CUHK)

Honors/Scholarships:

2023.8	Tencent Excellence in Research and Development Award
2023.1	Tencent Outstanding Leader
2022.7	Tencent Outstanding Leader
2021.7	Tencent Excellence in Operations Award
2020.12	Tencent Outstanding Leader
2019.12	Tencent Excellence in Operations Award
2019.7	Tencent Outstanding Reward
2019.1	Tencent FiT Outstanding Reward
2018.8	Tencent FiT Outstanding Reward
2015.12	Outstanding Young Teachers in Shenzhen University
2015.12	ISPRS Big Data Contest (2nd rank)
2015.6	ICC'15 Session Chair
2012.11	Tencent outstanding R&D award: User experience innovation
2012.8	Tencent innovation award: Intelligent video rating based on user behavior
2012.3	PAM&TMA 2012 – Vienna，Travel Grants award
2012.1	VCCE, the 5th rank & HKSEC, semifinal
2010	Sigcomm 2010 – New Delhi，Student Travel Grants award
2009-2012	Postgraduate Studentship holder of the Chinese University of Hong Kong
2006-2008	Postgraduate Studentship holder of the Chinese University of Hong Kong
2005	Excellent Graduation Thesis of Zhejiang University
2003-2004	Honeywell Scholarship for Excellent Student of Zhejiang University