



# ACM MOBIHOC 2021

Week of July 26, 2021  
Shanghai, China (Hybrid mode)



## The 22nd International Symposium on Mobile Ad Hoc Networking and Computing

July 26-29, 2021-Shanghai, China

### Introduction

ACM Mobihoc: International Symposium on Theory, Algorithmic Foundations, and Protocol Design for Mobile Networks and Mobile Computing will be held during July 26-29, 2021. It will be held in Shanghai, China. MobiHoc is a premier international symposium dedicated to addressing challenges in dynamic networks and computing.

MobiHoc 2021 will feature a highly selective technical program, multiple distinguished keynote addresses, and an exciting panel. In addition, it includes workshops that are focused on areas of emerging interest.

- URL : <https://www.sigmobile.org/mobihoc/2021/>

### Organizing Committee

#### Steering Committee



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Ohio State University

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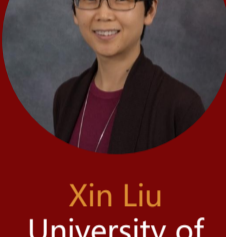


Yunxin Liu  
Tsinghua University

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Northeastern University



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University of California, Davis

#### Keynote Speakers



P. R. Kumar  
Texas A&M University



Kang G. Shin  
University of Michigan, Ann Arbor



Muriel Medard  
MIT



Matt Grossglauser  
EPFL

#### Industry Keynote



Ting Cao  
Microsoft Research Asia

### Program Schedule

July 26	July 27	July 28	July 29
8:00am-8:30am Registration	8:00am-8:15am Registration	8:00am-8:30am Registration	8:00am-8:30am Registration
8:30am-12:00pm Workshop	8:15am-9:00am Opening Remarks	8:30am-10:00am <b>Industry Track Session:</b> <b>Keynote 1: Alibaba</b> <b>Keynote 2: Ting Cao (MSRA)</b>	8:30am-9:30am <b>Keynote 5: Muriel Medard (MIT)</b>
<b>Data Driven Networking</b> Chair: Christopher G. Brinton (Purdue) Co-chair: Liang Liu (BUPT)	9:00am-10:00am <b>Keynote 1: P. R. Kumar(TAMU)</b>	10:00am-10:30am Break	9:30am-10:00am Break
	10:00am-11:00am <b>Keynote 2: Kang Shin (UMich)</b>	10:30am-12:00pm <b>Session 4: Queueing</b> · Job Dispatching Policies for Queueing Systems with Unknown Service Rates · Beyond Scaling: Calculable Error Bounds of the Power-of-Two-Choices Mean-Field Model in Heavy-Traffic · User Distributions in Shard-based Blockchain Network: Queueing Modeling, Game Analysis, and Protocol Design	10:00am-12:00pm <b>Session6: Edge computing</b> · Task Offloading with Uncertain Processing Cycles · Inexact-ADMM Based Federated Meta-Learning for Fast and Continual Edge Learning · An Online Mean Field Approach for Hybrid Edge Server Provision · Joint Update Rate Adaptation in Multiplayer Cloud-Edge Gaming Services: Spatial Geometry and Performance Tradeoffs
	11:00am-11:15am Break	12:00pm-1:30pm Lunch	12:00pm-1:30pm Lunch
	11:15am-12:45pm <b>Session 1: Mobile device and RFID</b> · Real-Time Deep Video Analytics on Mobile Devices · Rotation Sensing Using Passive RFID Tags · The Tags Are Alright: Robust Large-Scale RFID Clone Detection Through Federated Data-Augmented Radio Fingerprinting	1:30pm-3:00pm <b>Session 3: Privacy and security</b> · MultiAuth: Enable Multi-User Authentication with Single Commodity WiFi Device · Man-in-the-Middle Attack Resistant Secret Key Generation via Channel Randomization · DeepLoRa: Fingerprinting LoRa Devices at Scale Through Deep Learning and Data Augmentation	1:30pm-3:00pm <b>Session 7: Emerging topics</b> · SkyHaul: An Autonomous Gigabit Network Fabric In The Sky · Crowdfunding with Strategic Pricing and Information Disclosure · uScope: a Tool for Network Managers to Validate Delay-Based SLAs
	12:45pm-1:45pm Lunch	3:00pm-3:30pm Break	3:00pm-3:30pm Break
	1:45pm-2:45pm <b>Keynote 3: Matt Grossglauser (EPFL)</b>	3:30pm-5:30pm <b>Session 5: Age-of-information</b> · Minimizing Age-of-Information in Heterogeneous Multi-Channel Systems: A New Partial-Index Approach · Minimizing Age of Information via Scheduling over Heterogeneous Channels · Battle between Rate and Error in Minimizing Age of Information · An Online Learning Approach to Optimizing Time-Varying Costs of Aol	3:30pm-5:30pm <b>Session 8: Learning for Wireless Networks</b> · DeepBeam: Deep Waveform Learning for Coordination-Free Beam Management in mmWave Networks · MmWave Codebook Selection in Rapidly-Varying Channels via Multinomial Thompson Sampling · Neuro-DCF: Design of Wireless MAC via Multi-Agent Reinforcement Learning Approach · Weak Signal Detection in 5G+ Systems: A Distributed Deep Learning Framework
	2:45pm-3:00pm Break		
	3:00pm-5:00pm Session 2: Learning algorithms · Learning-NUM: Network Utility Maximization with Unknown Utility Functions and Queueing Delay · Robust Multi-Agent Multi-Armed Bandits · Accelerating Distributed Online Meta-Learning via Multi-Agent Collaboration under Limited Communication · GT-STORM: Taming Sample, Communication, and Memory Complexities in Decentralized Non-Convex Learning		

### Registration

Registration Type	Early Bird (by June 26, 2021)	Regular Rate (after June 27)
ACM/SIG Members- Full Conference	\$800	\$825
ACM/SIG Members- Full Conference(Author)	\$800	\$825
Non-ACM/SIG Members- Full Conference	\$875	\$975
Non-ACM/SIG Members- Full Conference(Author)	\$875	\$975
Student- Full Conference	\$400	\$500
1 Day	\$400	\$400
Online ACM/SIG Members	\$150	\$150
Online ACM/SIG Members (Author)	\$150	\$150
Online Non-ACM/SIG Members	\$200	\$200
Online Non-ACM/SIG Members (Author)	\$200	\$200
Online Student	\$50	\$50

### Venue



ACM MobiHoc 2021 will take place at Radisson Collection Hotel, a nice and comfortable hotel and conference center at China. You may reserve the hotel room via telephone 86-21-62129998, or via email with the following documents providing your information.

<https://www.sigmobile.org/mobihoc/2021/2021%20Shanghai%20Jiaotong%20University%20Hotel%20Reservation%20Letter%20in%20English.doc>

LOCATION:

15 minutes from Shanghai Hongqiao Airport (SHA), 45 minutes from Pudong International Airport (PVG). Easily accessible from the Yan An elevated highway. More information about Radisson Collection Hotel can be found here:

<https://www.radissonhotels.com/en-us/hotels/radisson-collection-shanghai-xing-guo>

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