

ICNC 2020 Brief Program Guide



Keynote Talks



Speaker: David Tse, Stanford University, USA Title: Solving the Blockchain Trilemma **Time:** 8:30-9:30, Monday, February 17, 2020

Speaker: Jie Wu, Temple University

Title: Challenges and Opportunities in Algorithmic Solutions for ...

Time: 8:30-9:30, Tuesday, February 18, 2020 Speaker: Elisa Bertino, Purdue University, USA Title: Security of 4G and 5G cellular networks **Time:** 8:30-9:30, Wednesday, February 19, 2020 Speaker: Claire Tomlin, UC Berkeley, USA

Title: Safe Learning in Robotics

Time: 10:00-11:00, Wednesday, February 19, 2020

Speaker: Sherman Shen, University of Waterloo, Canada Title: Reinforcement Learning for Resource Management in ...

Time: 8:30-9:30, Thursday, February 20, 2020

Plenary Talks









Speaker: Fumiyuki Adachi, Tohoku University, Japan Title: Ultra-dense Radio Access Network for 5G Systems **Time:** 13:30-14:30, Tuesday, February 18, 2020

Speaker: Jian Pei, Simon Fraser University, Canada

Title: Practicing the Art of Data Science

Time: 14:30-15:30, Tuesday, February 18, 2020

Speaker: Marwan Krunz, The University of Arizona, USA Title: ML Techniques for Fast Protocol Adaptation in WNs

Time: 13:30-14:30, Wednesday, February 19, 2020 Speaker: Baochun Li, University of Toronto, Canada Title: Federated Learning: Challenges and Opportunities **Time:** 14:30-15:30, Wednesday, February 19, 2020

Distinguished Lectures







Speaker: Hassam Hassanein, Queen's University, Canada Title: Towards Provisioning Vehicle-Based Information Services

Time: 10:00-12:00, Monday, February 17, 2020

Speaker: Hussein T. Mouftah, Ottawa University, Canada Title: Technology Trends for Connected and Autonomous...

Time: 13:30-15:30, Monday, February 17, 2020

Speaker: Moe Win, MIT, USA **Title:** Localization of Things

Time: 16:00-18:00, Monday, February 17, 2020

Speaker: Min Song, Stevens Institute of Technology, USA Title: New Algorithms Enabling On-Demand Dynamic Spectrum...

Time: 10:00-12:00, Thursday, February 20, 2020

Invited Short Talks



Speaker: Ender Ayanoglu, University of California, Irvine, USA **Title:** Massive MIMO with Spatially Correlated Antennas **Time:** 10:00 - 10:30, Tuesday, February 18, 2020

Speaker: Michele Zorzi, University of Padova, Italy

Title: Satellite Communication at Millimeter Waves: a Key ...

Time: 10:30-11:00, Tuesday, February 18, 2020

Speaker: Marco Ajmone Marsan, Politecnico di Torino, Italy **Title:** Effective Use of Small Cells in Heterogeneous RANs

Time: 11:00-11:30, Tuesday, February 18, 2020

Speaker: Rose Oingyang Hu, Utah State University, USA Title: ML Aided Mobile Edge Computing in Blockchain Based...

Time: 11:30-12:00, Tuesday, February 18, 2020









Speaker: Li-Chun Wang, National Chiao Tung University, Taiwan Title: Interference Management for Future Cellular Mobile ...

Time: 10:00-10:30, Tuesday, February 18, 2020

Speaker: Yi Qian, University of Nebraska-Lincoln, USA

Title: Smart Service-Aware Wireless Networks **Time:** 10:30 - 11:00, Tuesday, February 18, 2020

Speaker: Ling Liu, Georgia Institute of Technology, USA

Title: Cross-Layer Strategic Ensemble Defense ... **Time:** 11:00 - 11:30, Tuesday, February 18, 2020

Speaker: Tommaso Melodia, Northeastern University, USA Title: Toward a unified framework for wireless network slicing

Time: 11:30 - 12:00, Tuesday, February 18, 2020

















Speaker: Schahram Dustdar, TU Wien, Austria Title: Edge Intelligence - Edge Computing and AI **Time:** 16:00-16:30, Tuesday, February 18, 2020

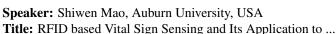
Speaker: Victor C.M. Leung, U. of British Columbia, Canada

Title: AIoT as a Service - Opportunities and Challenges **Time:** 16:30-17:00, Tuesday, February 18, 2020

Speaker: Ying-Dar Lin, National Chiao Tung University, Taiwan Title: 5G Mobile Edge Computing: Research Roadmap on ...

Time: 17:00-17:30, Tuesday, February 18, 2020

Speaker: Eiji Oki, Kyoto University, Japan Title: Resource Allocation in Middleboxes **Time:** 17:30-18:00, Tuesday, February 18, 2020



Time: 16:00-16:30, Tuesday, February 18, 2020 Speaker: Luiz Da Silva, Trinity College Dublin

Title: On the Connectivity of Drones to Mobile Networks

Time: 16:30-17:00, Tuesday, February 18, 2020

Speaker: Xinwen Fu, University of Massachusetts Lowell Title: A Unified End-to-end View of IoT Security and Privacy

Time: 17:00-17:30, Tuesday, February 18, 2020

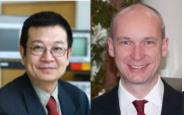
Speaker: Naoaki Yamanaka, Keio University, Japan **Title:** 5G network application: Intelligent route and schedule ...

Time: 17:30-18:00, Tuesday, February 18, 2020



Speaker: Zhu Han, University of Houston, USA Title: UAV Applications over Cellular Networks: Sensing ...

Time: 16:00 - 16:30, Wednesday, February 19, 2020







Speaker: Zhizhang Chen, Dalhousie University, Canada **Title:** Recent Progress on the Wireless Power Harvesting and ...

Time: 10:00-10:30, Thursday, February 20, 2020

Speaker: Jelena Misic, Ryerson University, Canada Title: P2P Network Issues in a Blockchain-based Ledger **Time:** 16:30-17:00, Wednesday, February 19, 2020

Speaker: Jie Wang, University of Massachusetts, Lowell, USA Title: AI-Assisted Text Mining and Document Engineering to ...

Time: 17:00-17:30, Wednesday, February 19, 2020

Speaker: Hamid Sharif, University of Nebraska-Lincoln, USA Title: Study of a Unified High-Speed Wireless Communications ...

Time: 17:30-18:00, Wednesday, February 19, 2020

Speaker: Falko Dressler, University of Paderborn, Germany **Title:** Integrating Haptic Signals with V2X-based Safety ...

Time: 10:30-11:00, Thursday, February 20, 2020

Speaker: Hui Li, Xidian University, China

Title: Evaluating Location Trace Privacy and Aggregation-based ...

Time: 11:00-11:30, Thursday, February 20, 2020 Speaker: Yonggang Wen, NT University, Singapore Title: DCWiz: Transforming Data Center Operations and ...

Time: 11:30-12:00, Thursday, February 20, 2020









Speaker: Panos Nasiopoulos, U. of British Columbia, Canada **Title:** A Quest for the perfect picture: Recreating the "Holodeck"

Time: 13:30-14:00, Thursday, February 20, 2020

Speaker: Abdulmotaleb El Saddik, University of Ottawa, Canada Title: Meeting the digital Twin: Multimedia Convergence for ...

Time: 14:00-14:30, Thursday, February 20, 2020

Speaker: Lee Swindlehurst, University of California, Irvine, USA

Title: Spatial Sigma-Delta ADCs: A Low Complexity ...

Time: 14:30-15:00, Thursday, February 20, 2020 Speaker: Manos M. Tentzeris, Georgia Tech, USA

Title: 4D-Printed "Zero-Power" Wireless Systems: A Quantum ...

Time: 15:00-15:30, Thursday, February 20, 2020

Speaker: Yu Cheng, Illinois Institute of Technology, USA Title: Machine Learning Meets Wireless Network Optimization: ...

Time: 16:00-16:30, Thursday, February 20, 2020

Speaker: Takehiro Moriya, NTT Labs, Japan

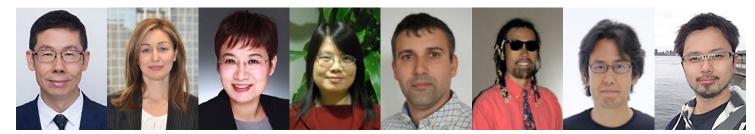
Title: 3GPP IVAS: standardization and applications to 5G and ...

Time: 16:30-17:00, Thursday, February 20, 2020 Speaker: Honggang Wang, UMass Dartmouth, USA Title: Towards Smart and Secure Connected Health **Time:** 17:00-17:30, Thursday, February 20, 2020 **Speaker:** Michele Zorzi, University of Padova, Italy

Title: Scalable and Accurate Modeling of the Millimeter Wave ...

Time: 17:30-18:00, Thursday, February 20, 2020

Industry Forums



AI for Future Communication Networks and Services Moderator: Haris Gacanin, Nokia Bell Labs, Belgium **Time:** 10:00 - 12:00, Wednesday, February 19, 2020

Speakers:

Jin Yang, Chief Scientist/S. Director, Com. Systems and Services, USA. Irena Atov, Principal Architect, Microsoft, USA. Sumei Sun, Head, Institute for Infocomm Research, Singapore Ying Li, Research Scientist, Facebook, USA.

The Future of Human-Machine Interaction at Home

Moderator: Haohong Wang, TCL Research America, USA. **Time:** 16:00 - 18:00, Wednesday, February 19, 2020

Speakers:

Akihiko K. Sugiyama, Project Researcher, Yahoo Japan, Japan Masahito Togami, Senior Researcher, Line Corporation, Japan Yotaro Kubo, Research Scientist, Google, Japan.

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Big Island, Hawaii, USA February 17-20, 2020

Time/Day	Monday (February 17)					Tuesday (February 18)					
	Keauhou II	Keauhou III	Keauhou IV	Mauna Kea	Mauna Loa	Keauhou II	Keauhou III	Keauhou IV	Mauna Kea	Mauna Loa	
8:20 - 8:30						Opening Remarks					
8:30 – 9:30	Keyno	te: David Ts	e, Standford	University, U	SA	Keynote: Jie Wu , Temple University					
9:30 – 10:00	Coffee Break										
10:00 - 12:00	Distinguished Lecture I: H. Hassanein	CNC I	CNC II	CNC III	CNC IV	Invited Talks I	Invited Talks II	CIS I	CLD	WNI	
12:00 – 13:30	Lunch										
13:30 – 15:30	Distinguished Lecture II: H. T. Mouftah	CNC V	CNC VI	CNC VII	CNC VIII	Plenary: Fumiyuki Adachi , Tohoku University, Japan Jian Pei , Simon Fraser University, Canada					
15:30 – 16:00	Coffee Break										
16:00 – 18:00	Distinguished Lecture III: Moe Win	CNC IX	CNC X	CNC XI		Invited Talks	Invited Talks IV	CIS II	CQSM	WN II	
19:00 – 21:00						Welcome Reception (Keauhou I)					

Time/Day		Wednes	day (Februai	ry 19)		Thursday (February 20)					
	Keauhou II	Keauhou III	Keauhou IV	Mauna Kea	Mauna Loa	Keauhou II	Keauhou III	Keauhou IV	Mauna Kea	Mauna Loa	
8:30 – 9:30	Keyno	te: Elisa Ber	tino , Purdue	University, U	JSA	Keynote: Sherman Shen , University of Waterloo, Canada					
9:30 – 10:00	Coffee Break										
10:00 - 12:00	Keynote: Claire Tomlin , UC Berkeley, USA Industry Forum					Distinguished Lecture IV: Min Son	Invited Talk VI	MLCN II	GCNC/ISA	SPC I	
12:00 – 13:30	Lunch										
13:30 – 15:30	•	larwan Kruna ochun Li, Uni	•	•	•	Invited Talk VII	MCC	SCSD I	WC I	SPC II	
15:30 – 16:00	Coffee Break										
16:00 – 18:00	Industry Forum	Invited Talk V	MLCN I	ISA	NAPE	Invited Talk VIII	WAHS	SCSD II	WC II	SPC III	
19:00 – 21:00	Ва	anquet & Awa	ard Ceremony	/ (Keauhou I)							

Registration Desk Hours

Monday (February 17): 8:00 - 16:00 Wednesday (February 19): 8:00 - 16:00 Tuesday (February 18): 8:00 - 16:00 Thursday (February 20): 8:00 - 12:00