



# IEEE GLOBECOM<sup>®</sup> 2020

**IEEE Global Communications Conference**

7-11 December 2020 // Taipei, Taiwan

Communications for Human and Machine Intelligence

## Best Paper Awards



**IEEE**



# BEST PAPER AWARD

## AD HOC & SENSOR NETWORKS SYMPOSIUM

*Xi Zhang, Jingqing Wang and H. Vincent Poor*

“Interference Modeling and Mutual Information Maximization Over 6G THz  
Wireless Ad-Hoc Nano-Networks”

# IEEE GLOBAL COMMUNICATIONS CONFERENCE

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# BEST PAPER AWARD

## COGNITIVE RADIO & AI-ENABLED NETWORKS SYMPOSIUM

*Ye Hu, Mingzhe Chen, Walid Saad, H. Vincent Poor and Shuguang Cui*

“Meta-Reinforcement Learning for Trajectory Design  
in Wireless UAV Networks”

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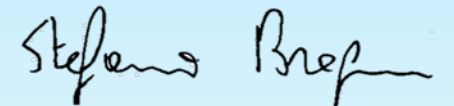
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**BEST PAPER AWARD**  
**COMMUNICATION & INFORMATION SYSTEM SECURITY**  
**SYMPOSIUM**

*Deemah H. Tashman and Walaa Hamouda*

**“Physical-Layer Security for Cognitive Radio Networks  
over Cascaded Rayleigh Fading Channels”**

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# BEST PAPER AWARD

COMMUNICATION, QoS, RELIABILITY & MODELING SYMPOSIUM

*Mehdi Setayesh, Shahab Bahrami and Vincent W.S. Wong*

“Joint PRB and Power Allocation for Slicing  
eMBB and URLLC Services in 5G C-RAN”

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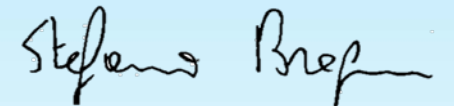
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# BEST PAPER AWARD

## COMMUNICATION SOFTWARE, SERVICES & MULTIMEDIA APPLICATIONS SYMPOSIUM

*Qiwei Wang, Jihong Yu, Can Xiong, Jia Zhao, Si Chen,  
Rongrong Zhang and Wei Gong*

“Efficient Backscatter with Ambient WiFi for Live Streaming”  
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**BEST PAPER AWARD**  
**COMMUNICATION THEORY SYMPOSIUM**  
*Andrea Munari and Alexey Frolov*

“Average Age of Information of Irregular Repetition Slotted ALOHA”

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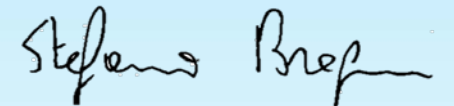
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# BEST PAPER AWARD

## GREEN COMMUNICATION SYSTEMS & NETWORKS SYMPOSIUM

*Qian Zhang, Jiansong Miao, Zhicai Zhang, F. Richard Yu,  
Fang Fu and Tuan Wu*

“Energy-Efficient Video Streaming in UAV-Enabled  
Wireless Networks: A Safe-DQN Approach”

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## MOBILE & WIRELESS NETWORKS SYMPOSIUM

*Sanket S. Kalamkar, Fuad M. Abinader Jr., François Baccelli,  
Andrea S. Marciano Fani and Luis G. Uzeda Garcia*

“Stochastic Geometry-Based Modeling and Analysis of Beam Management in 5G”

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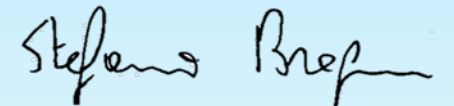
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# BEST PAPER AWARD

**NEXT GENERATION NETWORKING & INTERNET SYMPOSIUM**  
*Yongchao Dang, Chafika Benzaid, Yulong Shen and Tarik Taleb*

**“GPS Spoofing Detector with Adaptive Trustable  
Residence Area for Cellular based-UAVs”**

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# BEST PAPER AWARD

## OPTICAL NETWORKS & SYSTEMS SYMPOSIUM

*Can Zhang, Søren Forchhammer, Jakob Dahl Andersen,  
Tayyab Mehmood, Metodi P. Yankov and Knud J. Larsen*

“Fast SD-Hamming Decoding in FPGA for High-Speed Concatenated FEC  
for Optical Communication”

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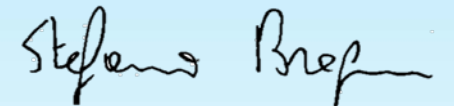
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# BEST PAPER AWARD

SIGNAL PROCESSING FOR COMMUNICATIONS SYMPOSIUM

*Xiaoling Hu, Feifei Gao, Caijun Zhong, Xiaoming Chen,  
Yu Zhang and Zhaoyang Zhang*

“An Angle Domain Design Framework  
for Intelligent Reflecting Surface Systems”

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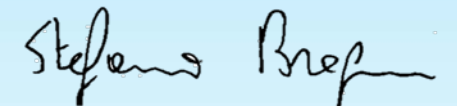
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**BEST PAPER AWARD**  
**WIRELESS COMMUNICATIONS SYMPOSIUM**  
*Jianhao Huang, Han Zhang, Chuan Huang and Wei Zhang*  
“Compressed Multiple Random Access with Energy Modulation”

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**BEST PAPER AWARD**  
**WIRELESS COMMUNICATIONS SYMPOSIUM**  
*Kai Yu, Haibo Zhou, Bo Qian, Zhixuan Tang  
and Xuemin (Sherman) Shen*

**“A Reinforcement Learning Aided Decoupled RAN  
Slicing Framework for Cellular V2X”**  
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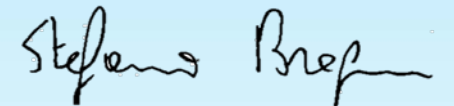
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**BEST PAPER AWARD**  
**SELECTED AREAS OF COMMUNICATIONS SYMPOSIUM**  
*Chuan-Zheng Lee, Leighton Pate Barnes and Ayfer Özgür*

*“Over-the-Air Statistical Estimation”*

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## SELECTED AREAS OF COMMUNICATIONS SYMPOSIUM

*Tadashi Nakano, Yutaka Okaie, Nikolaos Dietis  
and Andreani D. Odysseos*

“Growing Bio-nanomachine Networks: Application  
to Malignant Tumor Evolution and Progression”

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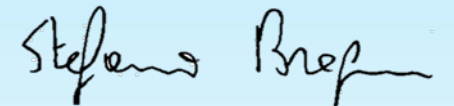
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