2025 21st International Conference on the Design of Reliable Communication Networks (DRCN 2025)

Ningbo, China
12-15 May 2025

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Monday, May 12 2025 ◉ Yingbin Building 3F Pacific Room 4

9:30AM - 12:00PM Registration

12:00PM – 1:00PM LUNCH BREAK

1:00PM -1:50PM Opening remarks

Keynote Session Chair: Kan Zheng

1:50PM-2:50PM Keynote 1

Reliability Challenges and Opportunities in Next-Generation Optical Networks...N/A

Joao Pedro

2:50PM-3:10PM COFFEE BREAK

Workshop Session Chair: Gang Wang

3:10PM-5:00PM Workshop on Cybersecurity and Resiliency of IoT, 5G, and Beyond

Cloud Server Backup Resource Allocation Models Based on Probabilistic Protection...1

Enhuai Cai, Ryuta Shiraki, Eiji Oki

Fairness-Aware Joint Optimization of 3D Trajectory and Task Offloading in Multi-UAV Edge Computing Systems...6

Hu Li, Long Qu, Wenfei Chen, Dongdong Shao

Reliable SFC Orchestration via VNF Parallelization...11

Yuhao Zhang, Xueling Wu, Long Qu, Dechao Sun

6:00PM - 8:00PM Welcome Reception

Session Chair: Zheng Zhou

8:30AM – 9:30AM Keynote 2

ML-Powered UAV Condition Monitoring: Optimizing Reliability, Communication, and Edge Intelligence...N/A

Abdallah Shami

9:30AM - 9:50AM COFFEE BREAK

9:50AM - 12:00PM Security and Robustness

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Exploring Quantum Key Distribution Routing Algorithms...30

João Gonçalo Machado Barreirinhas, Rita Girao-Silva, Teresa Gomes, Matthias Gunkel

12:00PM – 1:30PM LUNCH BREAK

Session Chair: Juan Liu

1:30PM - 2:30PM Keynote 3

Data-driven network management

Kohei Shiomoto

2:30PM - 3:30PM Keynote 4

Forget More Towers: URLLC Needs Satellites and HAPs...N/A

Cicek Cavdar

3:30PM - 3:50PM COFFEE BREAK

3:50PM - 6:00PM   Aerial and Edge Networks

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Yuxin Fang, Wenjun Wu, Lin Cheng , Yang Sun, Zhiqiang Dan

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6:00PM - 8:00PM Dinner

Wednesday, May 14 2025 ⊙ Yingbin Building 3F Pacific Room 4

Session Chair: Qiuji Luan

8:00AM - 10:00AM Tutorial 1

AutoML for Adaptive Intrusion Detection in 6G and IoT Systems...N/A

Abdallah Shami

10:00AM - 10:20AM COFFEE BREAK

10:20AM - 12:00PM Network Resilience and Reliability

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Aunas Manzoor, Mustafa Ozger, Cicek Cavdar

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Haiying Ren, Yu Zhang, Dan Wang, Man Li, Zigang Li

Constraint-Based Risk and Revenue Optimization for Network Disaster Recovery (invited)...75

Sara Taghavi Motlagh, Shahram Shah Heydari, Khalil El-Khatib

12:00PM — 1:30PM LUNCH BREAK

2:00PM — 5:30PM Social Event

Ningbo Museum

6:00PM-8:00PM Banquet

Thursday, May 15 2025 ⦿ Yingbin Building 3F Pacific Room 4

Session Chair: Minghong Zhu

8:00AM - 10:00AM Tutorial 2

AI for Semantic Communications...N/A

Shui Yu, Zhiyi Tian

10:00AM - 10:20AM COFFEE BREAK

10:20AM - 12:00AM Network Survivability and Reliability

On the Scaling of Reliable Interplanetary Networks with Deep Reinforcement Learning (invited)...83

Xiaojian Tian, Xiaoliang Chen, Xixuan Zhou and Zuqing Zhu

Wrap-UP