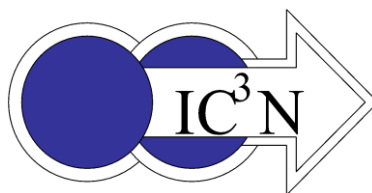# ICCCN 2021

The 30th International Conference on

Computer Communications and Networks

July 22, 2021

Final Workshop Program

Athens, Greece

ICCCN 2021 Workshop Program Overview

13:30 - 14:45	Keynote I (Room 1)	Keynote II (Room 2)	BDMLN (Room 3)
14:45 - 15:00	Virtual Coffee break 1		
15:00 - 17:00	BLESS (Room 1)	IoTSPT-ML (Room 2)	SmartCityCom 1 (Room 3)
17:00 - 17:15	Virtual Coffee break 2		
17:15 - 19:15	AFEC (Room 1)	SMS (Room 2)	SmartCityCom 2 (Room 3)
Closing			

Integrated Workshop ProgramSchedule

July 22 (Thursday)
All times listed in Athens, Greece time.

13:30 - 14:45

Keynote 1: Smart Cities: The Promise and Perils of Technology

Speaker: Dr. Bhaskar Krishnamachari, USC
Session Chair: Yu Chen (Binghamton University, USA)
Email: ychen@binghamton.edu

Keynote 2: Security and Privacy for the Internet of Things

Speaker: Dr. Biplab Sikdar, National University of Singapore
Session Chair: Abhishek Parakh (University of Nebraska at Omaha, USA)
Email: aparakh@unomaha.edu

BDMLN Workshop

Welcome by workshop Chairs: Yalong Wu (North Central College, USA) and Jie Lian (Shanghai Normal University, China)
Session Chair: Yalong Wu (North Central College, USA) Email: ywu1601@noctrl.edu
Jie Lian (Shanghai Normal University, China) Email: lianjie@shnu.edu.cn

- **Community Detection and Analysis in Air Pollution Complex Network Based on LPA**
  Jie Lian, Xin Ding and Jianguo Pan (Shanghai Normal University)

- **QoS-Aware Placement of Deep Learning Services on the Edge with Multiple Service Implementations**
  Nathaniel Hudson, Hana Khamfroush and Daniel E. Lucani (Northern Kentucky University, University of Kentucky and Aarhus University)

- **Bayesian Adaptive Path Allocation Techniques for Intra-Datacenter Workloads**
  Ali Malik, Ruairí de Fréin, Chih-Heng Ke, Hasanen Alyasiri and Obinna Izima (Tchnological University Dublin, National Quemoy University and University of Kufa)

15:00 - 17:00

BLESS Workshop

Welcome by workshop Chairs: Yu Chen (Binghamton University, USA) and Sachin Shetty (Old Dominion University, USA)
Session Chairs: Xueping Liang (University of North Carolina at Greensboro, USA) Email: x_liang@uncg.edu
Chin-Tser Huang (University of South Carolina, USA) Email: huangct@cse.sc.edu

- **Blockchain-enabled Personalized Incentives for Sustainable Behaviors in Smart Cities**
  Ayten Kahya (University of Southern California, USA), Anusha Avyukt (University of Southern California, USA), Gowri S. Ramachandran (Queensland University of Technology, Australia), Bhaskar Krishnamachari (University of Southern California, USA)

- **Casper - A Blockchain and Self-Sovereign Identity Empowered Digital Identity Platform**
  Eranga Bandara (Old Dominion University, USA), Xueping Liang (University of North Carolina at Greensboro, USA), Peter Foytik (Old Dominion University, USA), Sachin Shetty(Old Dominion University, USA) , Kasun De Zoysa (University of Colombo, Sri Lanka), Nalin Ranasinghe (University of Colombo, Sri Lanka)

- **Efficient and Trustworthy Authentication in 5G Networks Based on Blockchain**
  Jian Liu (University of South Carolina, USA), Chin-Tser Huang (University of South Carolina, USA)

- **Fed-DDM: A Federated Ledgers based Framework for Hierarchical Decentralized Data Marketplaces**
  Ronghua Xu (Binghamton University, USA), Yu Chen (Binghamton University, USA)

- **Secure and Privacy-Preserving Stored Surveillance Video Sharing atop Permissioned Blockchain**
  Alem Fitwi (Binghamton University, USA), Yu Chen (Binghamton University, USA)

IoTSPT-ML Workshop

Welcome by workshop Chairs: Geetha Thamilarasu (University of Washington Bothell, USA) and Abhishek Parakh (University of Nebraska at Omaha, USA)
Session Chairs: Geetha Thamilarasu (University of Washington Bothell, USA) Email: geetha@uw.edu
Abhishek Parakh (University of Nebraska at Omaha, USA) Email: aparakh@unomaha.edu

- **Synthetic and private smart health care data generation using GANs**
  Sana Imtiaz, Muhammad Arsalan, Vladimir Vlassov and Ramin Sadre (KTH Royal Institute of Technology, Otto-von-Guericke Universität Magdeburg and Université catholique de Louvain, Belgium)

- **PDTM: Phase-based dynamic trust management for Internet of things**
  Runbo Su, Arbia Riahi Sfar, Enrico Natalizio, Pascal Moyal and Ye-Qiong Song (LORIA, CNRS, Université de Lorraine, Military Academy of Tunisia / STD Lab and IECL, INRIA, Université de Lorraine)

- **Intrusion Detection System For IoT Networks Using Neural Networks With Extended Kalman Filter**

Divya Kulkarni, Shruti Rathore and Raj Jaiswal (BITS Pilani Goa Campus)

- **Grammatical Evolution for Detecting Cyberattacks in Internet of things Environments**
  Hasanen Alyasiri, John Clark, Ali Malik and Ruairí de Fréin (University of Kufa, The University of Sheffield and Technological University Dublin)

- **Security of continuous-variable quantum key distribution against canonical attacks**
  Panagiotis Papanastasiou, Carlo Ottaviani and Stefano Pirandola (Univ of York)

SmartCityCom 1 Workshop

Welcome by workshop Chairs: Shuhuiu Yang (Purdue University Northwest, USA) and Besma Smida (University of Illinois at Chicago, USA)
Session Chair: Shuhuiu Yang (Purdue University Northwest, USA)
Email: yangshuhui@gmail.com

- **Applying Harary Graph Structures to the Overlay Network Kademlia**
  Henner Heck and Arno Wacker (Universität der Bundeswehr München)

- **Timetable-based Routing in Fixed Schedule Dynamic Networks**
  Lata Narayanan and Cristian Oswaldo Rodriguez Santiago (Concordia University)

- **Co-governed Space-Terrestrial Integrated Network Architecture and Prototype Based on MIN**
  Guohua Wei, Hui Li, Yongjie Bai, Xin Yang, Huayu Zhang and Wenjun Li (Peking University Shenzhen Graduate School, Purple Mountain Laboratories Future Network Center,Peng Cheng Laboratory Network Communication Center)

- **Machine Learning Approach for Detecting Location Spoofing in VANET**
  Aekta Sharma and Arunita Jaekel (University of Windsor)

17:15 - 19:15

AFEC Workshop

Welcome by workshop Chairs: Wei Chang (Saint Joseph's University and Ning Wang (Rowan University)
Session Chairs: Wei Chang (Saint Joseph's University, USA) Email: wchang@sju.edu
Ning Wang (Rowan University, USA) Email: wangn@rowan.edu

- **Collaborative Optimization of Edge-Cloud Computation Offloading in Internet of Vehicles**
  Yureng Li, and Shouzhi Xu (China Three Gorges University)

- **MACE: A Mobile Ad-hoc Computing Emulation Framework**
  Bruno Chianca Ferreira, Guillaume Dufour, and Guthemberg Silvestre (Ecole Nationale de l'Aviation Civile, ONERA, and ENAC, Université de Toulouse, France)

- **A Game theory-based Computation Offloading Method in Cloud-Edge Computing Networks**
  Zhenning Wang, Tong Wu, Zhenyu Zhang, and Huan Zhou (China Three Gorges University)

- **Latency-aware Radio Resource Allocation over Cloud RAN for Industry 4.0**
  Haorui Peng, William Tärneberg, and Maria Kihl (Lund University)

- **Towards Testbed as-a-Service: design and implementation of an unattended SoC cluster**
  Gabriele Proietti Mattia, and Roberto Beraldi (Sapienza University of Rome)

- **Service Deployment and Service Request Optimization Scheduling in MEC enabled LEO Networks**
  Ye Zhang, Yong Tang, and Wenyong Wang (University of Electronic Science and Technology of China)

SMS Workshop

Welcome by workshop Chairs: Silvia Mirri (University of Bologna, Italy), Marco Furini (University of Modena and Reggio Emilia, Italy)
Session Chair: Silvia Mirri (University of Bologna, Italy) Email: silvia.mirri@unibo.it
Marco Furini (University of Modena and Reggio Emilia, Italy)
Email: marco.furini@unimore.it

- **SenseGraph: Affect Self-monitoring and Tagging Tool with Wearable Devices**
  Sebastian Alpers and Kuderna-Iulian Benta (University of Mannheim Mannheim, Germany; Babes-Bolyai University Cluj-Napoca, Romania)

- **RMOVO: a dApp for DLT-based Smart Mobility**
  Mirko Zichichi, Stefano Ferretti and Gabriele D'Angel (Universidad Politécnica de Madrid, Spain; University of Bologna, Italy; University of Urbino "Carlo Bo", Italy)

- **Designing an Affective States Input Tool for Biking**
  Octavian Cuibus, Kuderna-Iulian Benta and Sebastian Alpers (Technical University of Cluj-Napoca Cluj-Napoca, Romania; Babeș-Bolyai University Cluj-Napoca, Romania; University of Mannheim Mannheim, Germany)

- **Fostering user's awareness about indoor air quality through an IoT-enabled home garden system**
  Chiara Ceccarini, Ka Kei Chan, Lei Lok I, Rita Tse, Su-Kit Tang and Catia Prandi (University

of Bologna Bologna, Italy; Macao Polytechnic Institute Macao SAR, China; Macao SAR, China; Macao Polytechnic Institute Macao SAR, China; Macao Polytechnic Institute Macao SAR, China; University of Bologna Bologna, Italy)

- **CDetector: Extracting Textual Features of Financial Social Media to Detect Cyber Attacks**
  Jinwei Liu, Long Cheng, Hongmei Chi and Cong Liu (Florida A&M University; North China Electric Power University, China; Shandong University of Technology, China)

- **Towards Decentralized Complex Queries over Distributed Ledgers: a Data Marketplace Use-case**
  Mirko Zichichi, Luca Serena, Stefano Ferretti and Gabriele D'Angelo (Universidad Politecnica de Madrid, Spain; University of Bologna, Italy; University of Urbino, Italy; University of Bologna, Italy)

SmartCityCom 2 Workshop

Session Chair: Besma Smida (University of Illinois at Chicago, USA)
Email: smida@uic.edu

- **Smart Replication for Seamless and Efficient Real Time Communication in Underground Railway Train**
  Kariem Fahmi and Douglas Leith (Trinity College Dublin)

- **SCoIoT: Swarm-Computations for the Internet of Things**
  Christopher Scherb, Pascal Bürklin and Christian Tschudin (University of Basel)

- **TREMA: A traffic-aware energy efficient MAC protocol to adapt the LoRaWAN capacity**
  Laurent Chasserat, Nicola Accettura, Balakrishna Prabhu and Pascal Berthou (LAAS-CNRS)

- **Realization of an Intrusion Detection use-case in ONAP with Acumos**
  Shabnam Sultana, Philippe Dooze and Vijay Kumar (highstreet Technologies GmbH, Berlin, Orange Labs, Lannion, AT&T Services, Inc., New Jersey)

Closing

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