ICCCN 2021
The 30th International Conference on
Computer Communications and Networks
July 22, 2021
Final Workshop Program
Athens, Greece
### Integrated Workshop Program Schedule

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

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<td>BLESS (Room 1)</td>
<td>IoTSP-ML (Room 2)</td>
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**Closing**

### 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:** lianje@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
  (Technological 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 Kademia**
  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’Angelo (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; Babes-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 Politécnica 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)

• SColIoT: 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)

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