CALL FOR PAPERS

The Next Generation Networks (NGN) and future Communication Systems design will be driven by human expectations on better services, which in turn increases management complexity for network providers. New networking technologies are needed to efficiently and effectively cope with the intricacy in traffic demands, especially with the increase of over-the-top (OTT) services provided by operators and individual companies.

The main focus of the HPSR 2021 – the 22nd edition of HPSR conference – will be to assess how breakthrough changes occurring to networks and telecom are affecting areas related to switching and routing, and communication networks in general. We are soliciting original and thought-provoking works on big data, data analytics, cloud services, and machine-learning techniques applied to networking and switching and routing. Works on autonomous networks, 5G and beyond, IoT, Industry 4.0, social networks, network, cybersecurity, virtualization, and other advanced topics are also welcome. Research works on the following topics, but not limited to, are welcome for submission through the following symposia:

- Switching support to Extended reality (including virtual, augmented, and mixed reality)
- Routing and resource allocation for Tactile Internet
- High-speed packet processors
- Address lookup algorithms, packet classification, scheduling, and dropping
- Efficient data structures for networking applications
- Switching, bridging, and routing protocols whether wide-area or data centers
- Optical switching and routing
- Multiprocessor networks
- Network management
- Traffic characterization and engineering
- Power-aware switching, bridging, and routing protocols
- Nano-communication networks
- ICT enabling technologies for e-health systems
- Future technologies for IoT
- Application of data science and analysis on high-performance networks
- Applications of GPU on network functions
- Application of data analytics to switching and routing
- Machine learning-based routing and resource-allocation algorithms
- Traffic monitoring and modeling applied to switching and routing
- Traffic predictions in routing and resource assignment
- Switching architectures for 5G applications
- High performance, programmable networks for the Internet of things
- Dynamic bandwidth access and management for smart factory/Industry 4.0 applications
- Network performance for Human-Agent-Robot Teamwork (HART)
- Multi-access-Mobile Edge Computing (MEC)
- Blockchain technologies
- Decentralized applications (DApps)
- Decentralized autonomous organizations (DAOs)
- Software-defined networking (SDN)/Software-defined radio (SDR)
- Network and switch slicing
- Computation offloading
- Architectures of high-performance switches and routers, with a focus towards reconfigurable pipelines (P4, Openflow, etc.)
- Autonomous Resource allocation
- Network security.
- Next generation networks and Internet
- Cloud and data center security
- Intrusion detection with AI
- Virtual Private WANs
- Securing in SDN and networking slicing
- Support for the security of social networks
- Virtualized network functions (e.g., firewalls, intrusion detection systems, load balancers, etc.) built or managed using software-defined networks

IMPORTANT DATES

Paper Submission Due: January 15
Acceptance Notifications: March 15
Author Registration Deadline: April 15
Final Version Submission Due: April 30
Technical Sessions Dates: 7-9 June
## COMMITTEE

<table>
<thead>
<tr>
<th>Category</th>
<th>Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>International Steering Committee</strong></td>
<td>Abbas Jamalipour, Chair, University of Sydney, Australia</td>
</tr>
<tr>
<td></td>
<td>Nirwan Ansari, New Jersey Institute of Technology, USA</td>
</tr>
<tr>
<td></td>
<td>Mohammed Atiquzzaman, University of Oklahoma, USA</td>
</tr>
<tr>
<td></td>
<td>Hiroaki Harai, National Institute of Technology, Japan</td>
</tr>
<tr>
<td></td>
<td>Abdelhamid Mellouk, University Paris-Est Creteil</td>
</tr>
<tr>
<td><strong>General Chair</strong></td>
<td>Abdulhalim Dandoush, ESME-Sudria engineering school Paris</td>
</tr>
<tr>
<td><strong>TPC Co-Chairs</strong></td>
<td>Thiago Abreu, Université Paris-Est Créteil</td>
</tr>
<tr>
<td></td>
<td>Scott Fowler, Linköping University</td>
</tr>
<tr>
<td></td>
<td>Hassine Moungla, Université Paris Descartes</td>
</tr>
<tr>
<td><strong>Workshop co-Chairs</strong></td>
<td>Xavi Masip-Bruin, Universitat Politècnica de Catalunya</td>
</tr>
<tr>
<td></td>
<td>Eduardo Cerqueira, Federal University of Para</td>
</tr>
<tr>
<td><strong>Tutorial Co-Chairs</strong></td>
<td>Mohamed Faten Zhani, ÉTS Montreal</td>
</tr>
<tr>
<td></td>
<td>Nicolas Jara, Santa Maria University</td>
</tr>
<tr>
<td><strong>Panel Co-Chair</strong></td>
<td>Minho Jo, Korea University</td>
</tr>
<tr>
<td></td>
<td>Sami Souhi, University Paris-Est Creteil</td>
</tr>
<tr>
<td><strong>Invited Session Co-Chairs</strong></td>
<td>Lotfi Mhamdi, Leeds University</td>
</tr>
<tr>
<td></td>
<td>Said Hoceini, University Paris-Est Creteil</td>
</tr>
<tr>
<td><strong>Industry Chair</strong></td>
<td>Juan Corchado, University of Salamanca</td>
</tr>
<tr>
<td><strong>Publications Co-Chairs</strong></td>
<td>Moyamed-Aymen Labiod, Université Paris-Est Créteil</td>
</tr>
<tr>
<td></td>
<td>José Diaz, University Paris-Est Creteil</td>
</tr>
<tr>
<td><strong>Publicity Co-Chairs</strong></td>
<td>Hai Anh Tran, HUST Vietnam</td>
</tr>
<tr>
<td></td>
<td>Nadeem Javaid, University of Islamabad</td>
</tr>
<tr>
<td></td>
<td>Salim Bitam, University of Blakra</td>
</tr>
<tr>
<td><strong>Webmaster</strong></td>
<td>Van Tong, Université Paris-Est Créteil</td>
</tr>
<tr>
<td><strong>Local Organizer Co-Chairs</strong></td>
<td>Moyamed-Aymen Labiod, University Paris-Est Creteil</td>
</tr>
<tr>
<td></td>
<td>José Diaz, University Paris-Est Creteil</td>
</tr>
</tbody>
</table>
22nd IEEE International Conference on High Performance Switching and Routing
Recent advances in machine intelligence related to NGN and future communication systems
7-9 June 2021 // UPEC - Vitry-sur-Seine, suburban Paris, France

TECHNICAL PROGRAM COMMITTEE

• Yassine Hadjadji-Aoul, University of Rennes 1, France
• Paolo Bellavista, University of Bologna, Italy
• Stephane Maag, TELECOM SudParis, France
• Enzo Mingozzi, University of Pisa, Italy
• Adien Ksentini, EURECOM, France
• Wei Wei, Xi’an University of of Technology, China
• Miki Yamamoto, Kansai University, Japan
• Dimitra Simeonidou, University of Bristol, United Kingdom
• Joao Marco Silva, University of Minho, Portugal
• Ioannis Chochliouros, Hellenic Telecommunications Organization S.A., Greece
• Vangelis Angelakis, Linköping University, Sweden
• Torsten Braun, University of Bern, Switzerland
• Maria Calderon, Universidad Carlos III de Madrid, Spain
• Yanwu Ding, Wichita State University, USA
• Abdellah Chehri, University of Ottawa, Canada
• Marilia Curado, University of Coimbra, Portugal
• Christophe Chassot, University of Toulouse, France
• Sami Souhi, University Paris-Est Creteil, France
• Cherkouani Omar, University of Quebec in Montreal, Canada
• Farhan Siddiqui, Walden University, USA
• Paul Gendron, University of Massachusetts Dartmouth, USA
• Masayuki Murata, Osaka University, Japan
• Feng-Tsun Chien, National Chiao Tung University, Taiwan
• Ibrahim Korpeoglu, Bilkent University, Turkey
• Nadib Badache, USTHB, Algeria
• Hanen Idoudi, University of Manouba, Tunisia
• Salim Chikhi, University of Constantine 2, Algeria
• Mohamed Saad, University of Sharjah, United Arab Emirates
• Saurabh Agrawal, Delhi Technological University, India
• Aldebaro Klautau, Federal University of Para, Brazil
• Joaquim Martins-Filho, Federal University of Pernambuco, Brazil
• Felipe Rudge Barbosa, State University of Campinas, Brazil
• Haffaf Halid, University of Oran, Algeria
• Scott Burleigh, Jet Propulsion Laboratory, California Institute of Technology, USA
• Onur Altintas, Toyota InfoTechnology Center, USA
• Bigomokero Bagula, University of the Western Cape, South Africa
• Christian Makaya, IBM T. J. Watson Research Center, USA
• Isaac Woungang, Ryerson University, Canada
• Xin Jin, Johns Hopkins University, USA
• Jose de Souza, Federal University of Ceara, Brazil
• Reinaldo Vallejos, Universidad Técnica Federico Santa María, Chile
• Abdemalik Bachir, University of Biskra, Algeria
• Karima Benatcha, ESI, Alger, Algeria
• Yahya Slimani, University of Manouba
• Denis Genon-Catalot, Universite Grenoble Alpes, France
• Brice Augustin, University Paris-Est Creteil, France
• Hideaki Furukawa, NICT, Japan
• Hammad Bennoui, University of Biskra, Algeria
• Helio Waldman, State University of Campinas, Brazil
• Rodrigo Bortoleto, IFSP, Brazil
• Nadib Badache, USTHB, Algeria
• Leila Nasraoui, University of Manouba, Tunisia
• Rosa Abbou, University of Nantes, France
• Said Hoceini, University Paris-Est Creteil, France
• Noriaki Kamiyama, Fukuoka University, Japan
• Paulo Carvalho, Centro Algoritmi, Universidade do Minho, Portugal
• Ahmed M. Abdelmoniem, Assiut University, Egypt
• Ahmed Guessoum, University of Science and Technology Houchi Boumediene, Algeria
• Carmelo Bastos-Filho, Federal University of Pernambuco, Brazil
• Abderrahmane Lakas, UAE University, United Arab Emirates
• Guang-Jie Ren, IBM, USA
• Hassnaa Moustafa, Intel, USA
• Jorge Cobb, The University of Texas at Dallas, USA
• Karlus Assis, Federal University of Bahia, Brazil