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IEEE International Conference on High Performance Switching and Routing

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Conference program

1. Per-Flow Fairness in the Data Center – Yi Xi Gong, James Roberts, Dario Rossi (Telecom ParisTech)
2. Network-Model-Based vs. Network-Model-Free Approaches to Internet Congestion Control – Michael Schapira (Hebrew University) – invited paper
3. Creating Complex Network Services with eBPF: Experience and Lessons Learned – Sebastiano Miano, Matteo Bertrone, Fulvio Risso, Mauricio Vasquez Bernal, Massimo Tumolo (Politecnico di Torino, IT)
4. Fast Quagga Data Plane Based on Netmap Platform – Hasan Redžović, Aleksandra Smiljanić, Mihailo Vesović (Univ. Belgrade, RS)
5. Building a chain of high-speed VNFs in no time – Tom Barbette, Cyril Soldani, Romain Gaillard and Laurent Mathy (U. Liege) – invited paper
6. Nem: Toward Fine-grained Load Balancing through RNIC EC Offloading – Xiaoliang Wang, Cam-Tu Nguyen, Baoliu Ye, Zhuzhong Qian, Tang Bin, Wenzhong Li, Sanglu Lu (Nanjing Univ., CN)
7. Multiple Hash Matching Units (MHMU): An Algorithmic Ternary Content Addressable Memory Design for Field Programmable Gate Arrays – Pedro Reviriego (Univ. Antonio de Nebrija), Salvatore Pontarelli (CNIT Roma Tor Vergata), Anees Ullah (Center of Advanced Studies in Engineering, PK), Giuseppe Bianchi (Univ. Roma Tor Vergata); Ali Zahir (COMSATs institute of Information Technology, PK)
8. Flow Cache Cleansing with FPGA Hash Pipe for Highly Stabilized Software Data Plane – Koji Yamazaki, Yuta Ukon, Shuhei Yoshida, Saki Hatta, Yusuke Sekihara, Shoko Ohteru, Tomoaki Kawamura, Takahiro Hatano, Koyo Nitta, Akihiko Miyazaki (NTT Corp., Japan)
9. Real-Time Traffic Classification using Simple CART Forest on FPGAs – Tuncay Soylu, Oğuzhan Erdem, Aydın Carus, Edip S. Güner (Trakya University, TR)
10. A Survey on the Programmable Data Plane: Abstractions, Architectures, and Open Problems – Roberto Bifulco (NEC Research Europe), Gabor Retvari (BME Hungary) – invited pap
11. Beyond SmartNICs: Towards a Fully Programmable Cloud – Adrian Caulfield, Paolo Costa, Monia Ghobadi (Microsoft Research) – invited paper
12. Toward Optical Switching in the Data Center – William M. Mellette, Alex C. Snoeren, and George Porter (UCSD) – invited paper
13. Redefining the Economics of Reach with Integrated Optics – Cyriel Minkenberg, German Rodriguez, Nick Kucharewski (Rockley Photonics) – invited paper
14. Dynamic Spectrum Sharing Method in SDM based Optical Packet and Circuit Integrated Networks – Ken Nagatomi (Osaka Univ.), Yusuke Hirota (NICT), Hideki Tode (Osaka Prefecture Univ.), Takashi Watanabe (Osaka Univ.)
15. A Programmable Hardware Calendar for High Resolution Pacing – Salvatore Pontarelli (CNIT, Roma Tor Vergata), Giuseppe Bianchi (Univ. Roma Tor Vergata), Michael Welzl (Univ. Oslo)
16. T4P4S: A Target-independent Compiler for Protocol-independent Packet Processors – Péter Vörös, Dániel Horpácsi, Róbert Kitlei, Dániel Leskó, Máté Tejfel, Sándor Laki (ELTE Eötvös Loránd Univ., HU)
17. Scheduling Mixed Unicast and Multicast Traffic with Variable-Size Packets in Input-Queued Switches – Jie Xiao (Univ. Hong Kong), Kwan Yeung (Univ. Hong Kong), Sugih Jamin (Univ. Michigan)
18. A New Scheduling Algorithm for Input-Queued Switches with Mixed Unicast and Multicast Traffic – Jie Xiao (Univ. Hong Kong), Kwan Yeung (Univ. Hong Kong), Sugih Jamin (Univ. Michigan)
19. Backup Network Design Scheme for Multiple Link Failures to Avoid Overestimating Link Capacity – Yuki Hirano, Fujun He, Takehiro Sato, Eiji Oki (Kyoto Univ., Japan)
20. Efficient Make Before Break Capacity Defragmentation – Huy Duong Quang (Concordia University), Brigitte Jaumard (Concordia University), David Coudert (INRIA), Ron Armolavicius (CIENA)