ASAP 2021 Poster Session I

Poster 1.1 **“Power, Performance and Area Consequences of Multi-Context Support in CGRAs”**
Vimal Chacko and Jason Anderson, *University of Toronto, Canada*

Poster 1.2 **“SPNC: Optimizing Multi-Platform Compiler for Accelerating Sum-Product Network Inference”**
Lukas Sommer, Michael Halkenhäuser, Cristian Axenie and Andreas Koch, *Embedded Systems and Applications Group (ESA), TU Darmstadt, Germany*

Poster 1.3. **“NEMO-CNN: An Efficient Near-Memory Accelerator for Convolutional Neural Networks”**
Grant Brown, Valerio Tenace and Pierre-Emmanuel Gaillardon, *University of Utah, USA*

Poster 1.4. **“Edge-disjoint spanning trees in the line graph of hypercubes”**
Yu Qian, Baolei Cheng, Jianxi Fan, Yifeng Wang and Ruofan Jiang, *Soochow University, China*

Poster 1.5. **“Customized Instruction on RISC-V for Winograd-Based Convolution Acceleration”**
Shihang Wang, Jianghan Zhu, Qi Wang, Can He and Terry Tao Ye, *Southern University of Science and Technology, China*

Paper 1.1 "**To buffer, or not to buffer? A case study on FFT accelerators for ultra-low-power multicore clusters**"
Luca Bertaccini, Luca Benini and Francesco Conti, *ETH Zurich, Switzerland*

Paper 1.2 "**Algorithm and Hardware Co-Design for FPGA Acceleration of Hamiltonian Monte Carlo Based No-U-Turn Sampler**"
Yu Wang and Peng Li, *University of California, Santa Barbara, USA*

Paper 1.3 "**Improving Inference Lifetime of Neuromorphic Systems via Intelligent Synapse Mapping**"
Shihao Song, Twisha Titirsha and Anup Das*, Drexel Universi* ty*, USA*

Paper 1.4 "**A lightweight ISE for ChaCha on RISC-V**"
Ben Marshall, Daniel Page and Thinh Hung Pham, *University of Bristol, UK*

Paper 1.5 "**RFC-HyPGCN: A Runtime Sparse Feature Compress Accelerator for Skeleton-based GCNs Action Recognition Model with Hybrid Pruning**"
Dong Wen, Jingfei Jiang, Jinwei Xu, Kang Wang, Tao Xiao, Yang Zhao and Yong Dou *, National University of Defense Technology*, China

Paper 1.6 "**Virtual Circuit-Switching Network with Flexible Topology for High-Performance FPGA Cluster**"
Tomohiro Ueno, Atsushi Koshiba and Kentaro Sano, *RIKEN, Japan*

Paper 3.1 "**Talos: A Weighted Speedup-Aware Device Placement of Deep Learning Models**"
Yuanjia Xu, Heng Wu, Wenbo Zhang, Yuewen Wu, Tao Wang, Chen Yang and Heran Gao, *Institution of Software, Chinese Academy of Sciences, China*

Paper 3.2 "**Hodgkin-Huxley-Based Efficient Neural Simulation with Networks Connecting to Near-Neighbor Neurons**"
Masashi Ogaki and Yukinori Sato, *Toyohashi University of Technology, Japan*

Paper 3.3 "**Accelerating Recurrent Neural Networks for Gravitational Wave Experiments**"
Zhiqiang Que, Erwei Wang, Umar Marikar, Eric Moreno, Jennifer Ngadiuba, Thea Aarrestad, Hamza Javed, Bartłomiej Borzyszkowski, Vladimir Loncar, Sioni Summers, Maurizio Pierini, Cheung Peter and Wayne Luk, *Imperial College London, UK*

Paper 3.4 "**Array-Aware Neural Architecture Search**"
Krishna Teja Chitty-Venkata and Arun Somani, *Iowa State University, USA*

Paper 3.5 "**TwinDNN: A Tale of Two Deep Neural Networks**"
Hyunmin Jeong and Deming Chen, *University of Illinois at Urbana-Champaign, USA*

Paper 3.6 "**Image caption generation method based on an interaction mechanism and scene concept selection module**"
Liping Zhang and Qin Lu, *Qilu University of Technology, China*