



27th International Workshop on Post-Binary ULSI Systems (ULSIWS2018)

Tentative Program

11:00-13:30	Registration & Lunch (12:00-:13:30)
13:30-13:40	Opening Remark <i>General Chair, Masanori Natsui (Tohoku University, Japan)</i>
Invited Talk: Chair Masanori Natsui (Tohoku University, Japan)	
13:40-14:25	Making Efficient Quantized Neural Network Engine by Hardware/Algorithm Co-Design Shinya Takamaeda-Yamazaki (Hokkaido University, Japan)
14:25-14:35	Brief Break
Regular Session: Chair Shinobu Nagayama (Hiroshima City University, Japan)	
14:35-14:55	Machine Learning in Medical Imaging: Pitfalls and Opportunities Vincent Gaudet (University of Waterloo, Canada), Katherine Zukotynski (McMaster University, Canada)
14:55-15:15	Quantum Fuzzy Set, Quantum Integer, and their Applications <i>Tomoki Kanamitsu, Tomoyuki Araki (Hiroshima Institute of Technology, Japan)</i>
15:15-15:35	NISC: A Neural network Inspired Reconfigurable Standard Cell Hiroki Nakahara (Tokyo Institute of Technology, Japan)
15:35-16:00	Coffee Break
Regular Session: Chair Martin Lukac (Nazarbayev University, Kazakhstan)	
16:00-16:20	An Efficient Approach to Generating Secure Hardware IDs from Biased Physically Unclonable Functions Rei Ueno, Manami Suzuki, and Naofumi Homma (Tohoku University, Japan)
16:20-16:40	Automated Mapping Methods for the IBM Transmon Devices Kaitlin N. Smith and Mitchell A. Thornton (Southern Methodist University, USA)
16:40-17:00	Towards the Optimisation of Spectral Representations of Discrete Functions for Circuit Synthesis Radomir S. Stanković (Mathematical Institute of SASA, Serbia)
17:00-17:20	An Ultra-Large-Scale Integration Project: Designing CMOS Signal Chains for the World's Largest Radio Telescope, the Square Kilometer Array James W. Haslett and Leonid Belostotski (University of Calgary, Canada)
17:20-17:30	Closing <i>General Chair, Masanori Natsui (Tohoku University, Japan)</i>
18:00-	ISMVL2018 Reception

45 minutes (including Q&A) for Invited Talk,
15 (Talk)+5(Q&A) minutes for Regular Session