

Fifth International Workshop on
FPGAs for Software Programmers (FSP 2018)

August 31, 2018, Dublin, Ireland

co-located with

International Conference on Field Programmable Logic and Applications (FPL)

Program

- 09:15 – 09:30 Workshop Opening
- 09:30 – 10:30 **KEYNOTE 1: "FPGA design using CλaSH"**
Jan Kuper, QbayLogic, Enschede, The Netherlands
- 10:30 – 11:15 **Coffee Break with Poster Session**
- "Using Linux FIFOs to allow Flexible Hardware/Software Communications on Reconfigurable Systems-on-Chip"**
Ian Clough and Neil Bergmann
- "Improved Parallelization of Legacy Embedded Software on Soft-Core MPSoCs through Automatic Loop Transformations"**
Kris Heid, Jakob Wenzel and Christian Hochberger
- "Exact Mapping of Rewritten Linear Functions to Configurable Logic"**
Jonathan Greene
- 11:15 – 12:45 **Session 1 "High-Level Tools and Methodologies I"**
- "ZUCL: A ZYNQ UltraScale+ Framework for OpenCL HLS Applications"**
Khoa Pham, Anuj Vaishnav, Malte Vesper and Dirk Koch
- "Unfolding and Folding: a New Approach for Code Restructuring targeting HLS or FPGAs"**
Afonso Ferreira and João Cardoso
- "HatScheT: A Contribution to Agile HLS"**
Patrick Sittel, Julian Oppermann, Martin Kumm, Andreas Koch and Peter Zipf
- 13:00 – 14:00 Lunch Break
- 14:00 – 15:00 **KEYNOTE 2: "Making FPGAs accessible to developers and customers"**
Felix Winterstein, Xelera Technologies GmbH
- 15:00 – 15:30 **Session 2 "High-Level Tools and Methodologies II"**
- "LeFlow: Enabling Flexible FPGA High-Level Synthesis of Tensorflow Deep Neural Networks"**
Daniel Holanda Noronha, Bahar Salehpour and Steve Wilton
- 15:30 – 16:00 Coffee Break
- 16:00 – 17:00 **Session 3 "Applications and Mapping"**
- "A Case Study in Using OpenCL on FPGAs: Creating an Open-Source Accelerator of the AutoDock Molecular Docking Software"**
Leonardo Solis Vasquez and Andreas Koch
- "A Journey into DSL Design using Generative Programming: FPGA Mapping of Image Border Handling through Refinement"**
Akif Oezkan, Arsène Pérard-Gayot, Richard Membarth, Philipp Slusallek, Jürgen Teich and Frank Hannig
- 17:00 – 17:15 Workshop Closing

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