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

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

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 for FPGAs**" Afonso Ferreira and João Cardoso

"HatScheT: A Contribution to Agile HLS" *Patrick Sittel, Julian Oppermann, Martin Kumm, Andreas Koch and Peter Zipf*

Keynote 2

"Making FPGAs accessible to developers and customers" *Felix Winterstein, Xelera Technologies GmbH (Not available on CD)*

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

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 Özkan, Arsène Pérard-Gayot, Richard Membarth, Philipp Slusallek, Jürgen Teich and Frank Hannig