

Adaptive Computing, a Disruptive Technology - AMD Unified AI Stack

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In the last few years, the programmable hardware industry has moved from evolution to revolution, both in hardware architectures and software design methodologies. The introduction of hardware configurable VLIW processor arrays has blurred the lines between FPGA and other digital signal processing technologies. Encompassed by the umbrella term “Adaptive Computing”, these hybrid computational elements such as AMD (Xilinx) Versal’s AI Engines, are capable of performance far beyond what SIMD and VLIW processors can achieve. In this talk, we will discuss the architectural innovations of the AI Engines, as well as the development methodology needed to program them.

The talk will give some outlook to the AMD road map and the progress on a unified AI Stack covering CPUs, GPUs and Adaptive Computing devices.

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