What cloud computing can teach us about embedded many-core programming?

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Abstract. While seemingly worlds apart, cloud computing is confronted with many of the similar issues than embedded systems: power consumption, energy efficiency, optimal usage of resources such as processing cores and memory etc. This talk will explore how solutions and programming paradigms emerging in the cloud computing space can be used in the embedded space - and vice versa.

Biography

András Vajda holds the title of expert in cloud computing within Ericsson’s global cloud computing program, focusing on the complete operational and business support system stack for Ericsson’s offering. Previously, Vajda held positions within Ericsson Research and the Networks business unit. Within Ericsson Research he was one of the initiators of Ericsson’s cloud research efforts, driving the strategy and architecture work; he was also responsible for co-ordinating Ericsson’s software research activities and the interaction with external parties in the area of many-core programming. At the business unit Networks he was the chief architect of the Ericsson Gateway for Mobile Networks and contributed to the development of other network elements, such as the 3G Radio Network Controller. Vajda also represents and represented Ericsson in the steering groups of several international and national initiatives, such as the European Network of Excellence for High-Performance Embedded Architecture and Compilers (HIPEAC, http://www.hipeac.net). He is the author of the book “Programming Many-core Chips”, published by Springer in 2011.