ABSTRACT

While the commodity processors are already transitioning from a few-way to massive parallelism, much of the software is falling behind. In this talk we will review the architectural features of modern processors, including CPUs and GPUs, and derive some trends for future generations. Based on these, we will define the common requirements for algorithms to achieve high performance on all these architectures.

BIOGRAPHY

Dr. Paulius Micikevicius is a Developer Technology Engineer at NVIDIA, with a focus on parallel computation and performance analysis. Prior to joining NVIDIA, Dr. Micikevicius was a faculty member of Computer Science at Armstrong Atlantic State University. He received a Ph. D. (CS) from UCF, in 2002.