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**«AMD strategy in exascale supercomputing and Radeon Technology Group Global academic connections»**

Brief overview of Exascale Computing initiative of US DoE with AMD main goals and challenges. AMD's Vision and Technologies for Exascale Computing which includes both hardware software domains with heterogeneity paradigm. Open SW development solution with GPUOpen and Radeon Open Compute (ROC) Initiatives. Review of ROCm compiler stack and AMD new HPC product lines with new Zen CPU and Radeon GPU cores to build exascale supercomputers. New Zen CPU core few details are also revealed.

Overview of five levels in hierarchy of cooperation with academic entities proposed by AMD Radeon Technology Group to academic institutions and universities:

1. NCI - New Customer Incubation in Academic Education Network
2. AOS - Academic Involvement in GPUOpen and other open source software activity
3. SRP - Sponsored Application Research and Academic Publications
4. JRD - Joint R&D Activity and Publications (typical for AMD Research)
5. FTR - Future Technology Research Collaboration

Few university packages with textbooks and graphics accelerators boards may help to fulfill the conditions to join academic cooperation programs in all levels of hierarchy.

**Bio:**

Dr. Timour Paltashev works in Silicon Valley almost 20 years. He holds PhD (1987) and Doctor of Technical Sciences (1994) degrees in computer engineering. He works in graphics and computer architecture professional field and has 24 US patents and over 10 pending patent applications. At present time he works in AMD Radeon Technology Group, previously he worked in Vivante Corporation, S3 Graphics Inc. and S3 Inc. respectively. Academic activity includes long term experience in graduate level courses teaching in computer graphics, computer architecture and system-on-chip design.