

2008 CHREC Projects

The George Washington University Site of CHREC

G5-08: Library Portability for HLL Acceleration Cores

- *Goals:* (a) Provide HLL core portability through the Portable Framework Interface (PFIF); (b) Extend PFIF design
- *Challenges:* (a) HLLs have diverse approaches for portability across systems; (b) Third party libraries are not generally interoperable with HLLs

G6-08: Intelligent Deployment of IP Cores

- *Goals:* (a) Identify HW tasks and deploy them in an intelligent way; (b) Reduce the number of FPGA configurations
- *Challenges:* (a) Inter-functional optimizations are difficult to discover; (b) No standards for core interconnection

G7-08: Partial Run-Time Reconfiguration for HPRC

- *Goals:* (a) Investigate experimental realities of Partial RTR on HPRC systems; (b) Enable hardware virtualization (multi-core FPGA & multitasking)
- *Challenges:* (a) PRTR is in its infancy; (b) Resource management in many core devices