Kunle Olukotun

Computer Architecture

Which application class will benefit most from each enhancement? Explain your reasoning.

	Floating point Scientific	Large DB application
Large Icache		
Static branch prediciton		
Lots of registers in the ISA		
Victim cache		
Software Prefetching		
4-way S.A. Icache		
Fetch both branch target and fall-through		
Wide Instruction issue with dynamic scheduling		
More branch displacement bits		
Nonblocking cache with many outstanding misses		
Large Dcache block size		
Deep pipelining		
Hardware Prefetching		
High Main Memory bandwidth		