Spring 2005 Memory Class Project Ideas

1. Create a CMP version of (public release-able) sim-alpha. Do FB-DIMM study. Channel/pin-count tradeoff. (2 or 3 people)

2. Replace core of sim-DRAM with event-driven framework, validate against resource-usage model and power constraints. Write paper and publicise availability. (2 or 3 people)

3. Trace based simulation work. Use the request access distance statistic to project benefit of Write buffers and/or Virtual channel technology. Re-ordering policies. etc.

4. DRAM memory system visualization: Automatically draw graphs! Dynamic and Static (Generic, SDRAM, DDR, DDR2, DDR3 etc. output to .mif)