## **ECS 158, Programming on Parallel Machines**

Norm Matloff Fall 2013



**GPU** programming:

"A supercomputer on your desk!"





For multicore machines



For clouds



For clusters

- apps everywhere: Big Data, bioinformatics, database, text mining, graphics, finance, Pringles (huh?), etc.
- ECS 150 has been officially DROPPED as a prerequisite (now just recommended)
- group work: 4-5 programming assignments, 1 group quiz, term paper (serves as final)
- exams: weekly quizzes, including one group quiz; no midterms or final
- sample workload: http://heather.cs.ucdavis.edu/~matloff/158.html
- OpenMP, CUDA, Hadoop, MPI are cross-platform, industry standards
- open-source textbook