

Computer code too slow?

Learn *High-Performance Scientific Computing* at NYU this fall!

What will you learn in this class?

You will learn how to write programs that run fast and use computers efficiently.

If you have a computation-heavy problem that you would like to go faster, you're especially welcome.

What to expect

- Basic processor architecture / Performance of sequential code
- Shared Memory and **OpenMP**
- Distributed Memory and **MPI**
- **GPUs** and **OpenCL**
- Tools and Debuggers
- Examples drawn from numerical linear algebra and numerical methods for PDEs

Class and homework assignments will be based on C. (warm-up provided for those coming from Java or Fortran)

Assessment: Weekly homework, final project. (recommended even if auditing)

We're looking forward to seeing you in the fall!

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CSCI-GA 2945 / MATH-GA 2011



bit.ly/hpc12



OpenCL



MPI



NYU