


# Efficient Code

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## Optimisation in one slide

- I can't teach you this in half an hour
- Please follow some computer science courses instead
- Regardless, a few open doors
  
- Come talk to us
- Break it down to as small a “slow” problem as possible
- If it's a few lines of code, think about what's going on
- Measure! If you think you know what's slow, you're probably wrong. E.g. top, perf, Intel VTune, AMD uProf, callgrind, etc.
- If you're doing machine learning: use a GPU (or more)
- Have a look on the web if a library exists that solves your issue
- Think about data I/O; copying files, reading files, etc.
- If data parallelisation is possible: use more computers
- (Your) wall-clock time is the most expensive, so don't waste it on premature optimisation