GPU Programming 2017/18

Project Rules

Project rules

- All code is yours.[1]
- Document performance optimizations.
  - Estimate the peak performance that can be achieved using CUDA and compare your implementation.
  - Begin with a CPU reference implementation that should also be used to validate the correctness of your CUDA code.
- Projects are open ended.
  - You can pivot it into a direction.
- Current status is discussed every week in the tutorials.
- At the end:
  - 10 min presentation
  - 1 page write-up

Write-up

- Please use a template from this page: http://www.siggraph.org/learn/instructions-authors. Latex is preferred.
- Your document should include:
  - A short description of the objective / problem of your project.
  - Description of the basic algorithm that is used for the implementation.
  - Parallelization strategy for CUDA device.
  - Optimizations you implemented.

[1] When you think an exception is warranted then discuss it with the instructor.

  - Interesting problems / aspects you encountered.
  - Experimental results (e.g. performance comparisons)
  - Outlook, what other optimizations or further development would you explore next.
  - References to resources you used.
  - No abstract is needed.

- Please try to keep the length of your document at about a page of text.
- Hand in the documentation (including source code, as-is) via email by 30/1/2018.