GPU Programming in Computer Vision

Winter Semester 2013-14

Evgeny Strekalovskiy, Maria Klodt, Jan Stühmer, Mohamed Souiai

Time Schedule and Grading

Time Schedule:

- March 3, 5-10: Lecture from 10 to 14 h, Exercises from 14 to 18 h.
- March 11-28: Project Phase, work on your own.
- March 31-April 4: Presentation and live demo.

Grading:

- 25 % : Exercises of the first week
- 75 % : Project

Exercises (First Week)

- Work in groups of 2-3 students.
- Groups must be formed today → **put your names on the list.**
- There will be one exercise sheet every day of the first week (four sheets in total).
- We will check your solutions of each sheet on the next day after the lecture.
- You have to be able to explain the code to receive the points.

Project Phase (March 11-28)

- Implement a computer vision algorithm in CUDA using images from a live webcam stream.
- We will give an introduction of possible topics, but you are invited to be creative and make own suggestions.
- Meet with your tutor in the beginning of next week to agree on a topic.
- Again, work in groups of 2-3 students.
- The source code must be sent to your supervisor by **March 31**.
- If we detect cheating, for example too much similarity in large parts of the solutions, all involved groups will get the grade 5.0.

Presentation and Demo (Last Week)

- 15 minutes per group
- Prepare slides
- Explain the task
- Explain how you proceeded to solve the task
- Show your results
- Give a live demo with the webcam

Course Website and Mailing Lists

Course Website:
http://vision.in.tum.de/teaching/ws2013/gpucourse_ws2013

Tutor Email: cuda-ws1314@in.tum.de

Students Email: cuda-students-ws1314@in.tum.de