2017 ASCI Spring School on Heterogeneous Computing Systems
"Assignments"

4 ECTS credit points breakdown

- Attend lectures (this week)

- Pitch presentation (on chosen topic – next slides)

- Perform 1-out-of-3 labs

- Write short report (on chosen topic – next slides)

Topics suggestions of talks

- Applications & Algorithms
    - Image processing
    - Deep learning
    - SKA
- Languages & Compilers
    - Clash
    - Halide
    - OpenMP 4
- Architectures (design)
    - CPUs & GPUs
    - FPGAs & accelerators
    - CGRAs, parameterized CPUs
    - Approximate computing
- Technology
    - In-memory computing
    - Quantum computing

Assignments

- Write a report (maximum 6 pages) – IEEE style
- Choose 2 items per topic – from presented topics preferred, or your research + 1 topic
- Motivate clearly the choice(s)
- Reason why the combination works & potential
- OR: Identify a clear "gap" in chosen topics
- Quantify your claims (as much as possible)
- At least 5/6 references
- Be adventurous in your choices, instead of choosing a well-throdden path – this impacts the grade

Grading committee

- Henk Corporaal
- Andy Pimentel
- Gerard Smit
- Todor Stefanov
- Ana Varbanescu
- Stephan Wong

Grade composition

Grade (pass/fail) based on:

- 10% presentation
- 50% paper
- 40% lab report

Deadlines:

- Presentation – Thursday June 1, 2017
- Paper & lab report – Sunday August 27, 2017

Result: Friday September 8, 2017