#### Seminar Projects

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#### Goal

critically and practically

evaluate or compare

one or several techniques

## Organisation

#### by

- 15 June create groups of 1 3 people
- 27 June project proposal (1 page max)
- 27 June 25 July project work
   Questions? Monday 16-18 and Tuesday 15-17
   or via email
- 25 July (tent.) project presentations

# Project <u>Suggestions</u>

ACCEPT: <a href="https://sampa.cs.washington.edu/accept">https://sampa.cs.washington.edu/accept</a>

Install the "approximate compiler" and try to run it on some unseen benchmarks. Your report/ presentation should comment on how easy it is to get resource savings and how much you were able to achieve.

• NPiler: NPU Compiler (<u>http://act-lab.org/artifacts/npiler/</u>)

Install the neural processing unit compiler and try it on some unseen benchmarks.

- Intel Power Gadget: the gadget (<u>https://software.intel.com/en-us/articles/intel-power-gadget-20</u>) can sample and log the power and energy with a frequency of up to 20ms.
  - use it to verify claims about energy/power savings of some technique seen
  - compare energy/power usage across different machines (to test the validity of the savings)
  - use it to measure energy on new examples and try to reduce the energy with "normal" means

#### Project Proposal (1 page max, due 27 June via email)

- Who project members
- What short description of what you want to do
- Why short explanation of the rationale
- **How** work separation (who is doing what)
- When time plan (roughly by week)

You can send me drafts for review/comments until 23 June.

If you want to use a certain tool in your project, check it out first!