

COMP3006J Cloud Computing

# Group Project

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# Intro



25% of the overall assessment.



Objective: Improve the performance of your project(s) using cloud computing



The project has to be meaningful (it cannot be a toy program).



To submit: A single PDF file ( $\leq 4$  pages)

using IEEE double-column conference paper format (with a Weiyun link to your  $\leq 4$  mins demonstration)



Deadline: End of week 12 (10 May)

# Report – Template

- Official link:
  - <https://www.ieee.org/conferences/publishing/templates.html>
- Direct links:
  - Word: <https://www.ieee.org/content/dam/ieee-org/ieee/web/org/conferences/conference-template-a4.docx>
  - LaTeX (source files): [https://www.ieee.org/content/dam/ieee-org/ieee/web/org/pubs/conference-latex-template\\_10-17-19.zip](https://www.ieee.org/content/dam/ieee-org/ieee/web/org/pubs/conference-latex-template_10-17-19.zip)
  - LaTeX (Overleaf): <https://www.overleaf.com/latex/templates/ieee-conference-template/grfzhnncsfqn>
- You can remove unnecessary parts to save spaces (e.g., authors emails/affiliations/addresses, abstract, keywords, acknowledgement, references...)

# Report – Intro (5')

- What is your project?
- Clearly introduce your project in brief
  - 1~2 sentences: Background (e.g., on-line shopping, speech recognition)
  - 1~2 sentences: Inputs
  - 1~2 sentences: Outputs
- Footnote: a Weiyun link to your 4 mins demonstration video

# Report – Performance Analysis (15')

- What is the performance bottleneck of your project?
- You need to analyse all/major steps (max. 5) of your computation tasks
  - Step 1: what is this step doing, what are the resources needed...
  - Step 2: ...
  - The analysis should be technically reasonable

- Then, use a table to summarize

	CPU	GPU	Disk I/O	Storage – Memory	Storage - Disk	...
Step 1	High	Low	Low	Low		
Step 2	Low	Low	High	Medium		
...						

# Report – Cloud Solution (15')



- What is our selected cloud solution (a certain public cloud service)?
- Why does this cloud service can potentially solve your performance bottleneck compared to other candidates?
- Does this cloud service improve the CO<sub>2</sub> emissions?
- More details about your selected cloud service.
  - VM configuration? Estimated Budget?

# Report - Results and analysis (15')

- Performance Comparison (Local, Cloud 1, Cloud 2...)
  - E.g., running time, resource consumed, etc.
- Summarize the budget and actual money spent.
- Summarize the improvements in CO<sub>2</sub> emissions (if any)?
- Analyse:
  - Is the perf bottleneck of your project solved? Why or why not?



# Video

- A quick overview of your project.
  - To explain/demonstrate things that is unclear in your written report.
  - We do NOT grade your video!
- Maximally 4 mins, in English
- Share link using Weiyun (added to the introduction section of your report)



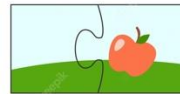


# Marking Criteria

- Presentation Clarity



- Technical correctness



EASY



DIFFICULT

- Technical difficulty

- Closeness to the lecture/lab materials



- Project size regarding the number of team members

