

CSE3000 Weekly Progress Presentation

WEEK 7

Diana Micloiu



What have I done so far?

Progress on latency prediction models

- Use predefined network topology with latency between replicas from AWS Cluster Monitoring tool - cloudping = **reliable experiments**.
- Adapt the way we generate latency vectors to account for link latency between replicas and an offset based on the type of message.
- Conducted experiments for Hotstuff and Chained Hotstuff and its variants for multiple scenarios + **added an experiment on leader rotation impact**.
- Decided on a final representation of the results in the paper by conducting an extensive experiment over multiple views with all behaviour types of the protocol.

Progress on RESULTS

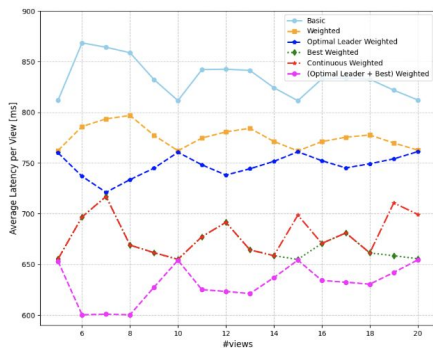


Figure 2: Average latency per view in **Hotstuff** protocol variants, $f = 1, \Delta = 1$

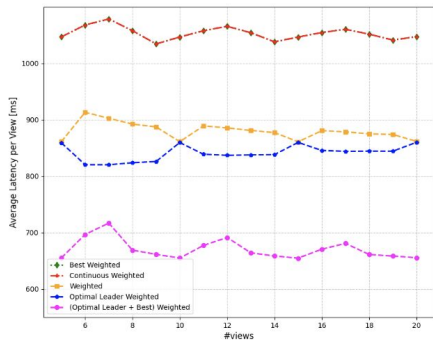


Figure 3: Average latency per view in **Hotstuff** protocol variants for **faulty scenario**, $f = 1, \Delta = 1$

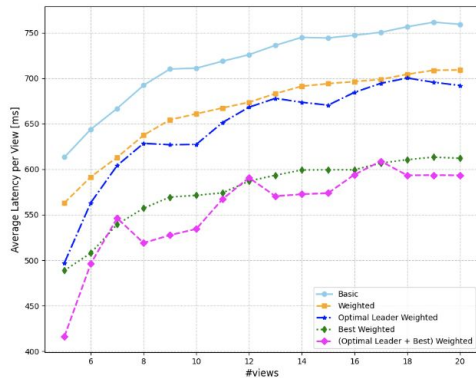


Figure 4: Average latency per view in **Chained Hotstuff** protocol variants, $f = 1, \Delta = 1$

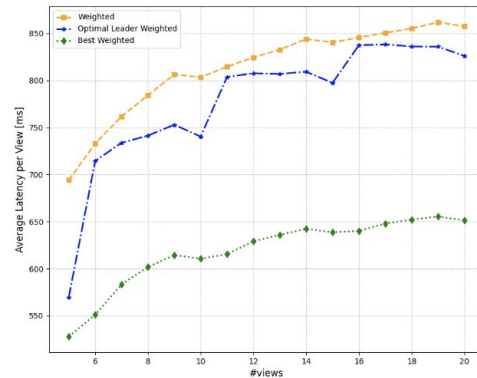


Figure 5: Average latency per view in **Chained Hotstuff** protocol variants for **faulty scenario**, $f = 1, \Delta = 1$

Progress on paper

- ➔ All sections apart from Abstract and Conclusions are completed.
- ➔ Submitted Draft 1 of the research paper.
- ➔ Provided feedback to peers on FeedbackFruits.



What is next?

Goals for the week onwards

1. Complete paper.
2. Adjust paper and experiments based on feedback.
3. Provide a way to gather data from the experiments conducted and structure the codebase clearly to ensure reproducibility.



My Questions