

15-400 Spring 2018 Bi-Weekly Report 6

Shuli Jiang

shulij@andrew.cmu.edu

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Major Change:

Currently no major changes

What You Have Accomplished Since Your Last Meeting:

1. Connected the controller (which starts experiments) and the benchmark (which measures the performance of the database).
2. Fixed small issues of the currently machine learning knobs tuning pipeline and improved its performance.
3. Started the second phase of experiments — using the current fixed machine learning tuning pipeline to tune ~3000 database performance samples collected from AWS Postgres 9.4 and 9.2 (with previous workload) three weeks ago to see how the current pipeline does on those data.

Meeting Your Milestone:

Yes.

Surprise: No. But will come soon.

Looking Ahead:

After the second phase of experiments, I'll use the collected tuned knobs from Postgres 9.4 to tune Postgres 9.2 and do the other way around as well next week. Another goal by the end of this semester is to reproduce the plots of AWS database performance of the PhD student, Dana's last paper, from data I'm collecting right now. When she was writing her paper, she manually started all experiments which was painful but now we replaced it with a new pipeline. So if the pipeline works as expected it will reproduce similar plots as the ones in her paper.

Revisions to Your Future Milestones:

No major changes.

Resources Needed:

Yes. I have got all the resources I need.