THESIS STATUS REPORT

WEEK 46 – 47

DONE

I installed *minikube* as part of *Docker Desktop* and deployed *cAdvisor* to see what metrics are available. To test it I used a Kubernetes load testing tool called *kboom*. I found out that *Prometheus* and *Grafana* are better tools to make the data visible than *cAdvisor* alone. And I choose *pytorch* as my machine learning framework for python.

I have done research for the "related work" section of the thesis and to gather ideas for my own approach. I concluded that it would make sense to use Support Vector Regression for the performance model. Because it is more powerful than linear regression and has time and accuracy benefits compared to a neural network because of the few training data that will be available.

UPDATE FROM SYNC MEETING (20.11.2020)

We discussed that the machine learning model should update based on the real-world data which was gathered in a to be specified time period.

NEXT STEPS

1. Write the "related work" section of the thesis
2. Deploy/install *Prometheus* and *Grafana*
3. Start implementing the synthetic load testing sandbox