# THESIS STATUS REPORT

# WEEK 02

#### DONE

I connected the single steps of the synthetic load testing and deployment. Both processes are now automated.

I decided to use Linkerd as a service mesh to gather network metrics. It is easier to deploy and more lightweight than other service meshes like *Istio* and *traefik*. Furthermore, it contains its instance of *Prometheus* which makes collecting its metrics more accessible. I accomplished to deploy Linkerd into the Kubernetes cluster and I am now able to collect these metrics.

I started to filter and format all gathered metrics and I am now finding out which metrics are useful in which particular way and combination.

Additionally, I deployed *Grafana* and started to create a dashboard where all relevant metrics can be observed in real-time.

I started to research about how an auto scaler could be implemented.

## UPDATE FROM SYNC MEETING (15.01.2021)

?

## **NEXT STEPS**

- 1. Format the Data for machine learning and extra-p usage
- 2. Develop and implement the machine learning model
- 3. Implement extra-p
- 4. Implement the auto scaler