

## Two-weekly report

**Miss. Singh, Priya**

Matriculation Number: **1428461**

Group Number: **6**

Project Number: **3**

Email: **priya.singh@stud.fra-uas.de**

### **Q. What have I accomplished since the last Daily Stand-up?**

Since the last stand up and presentation, we had some defined targets for the group. I was able to monitor a remote machine server and log its metrics. Grafana plugins to download data from dashboards was explored and its endpoints allowed to download data in csv format. Apart from this, a python script was generated that consolidates different metrics like cpu, memory, network into a single file with timestamps as unique identifiers. Consolidated data for a brief amount of time was continually recorded and saved. A random forest supervised learning algorithm was train and tested with about 170 data points. It helped us gain clarity over the decision-making process.

### **Q. What will I accomplish until the next Daily Stand-up?**

In the coming weeks, we will improvise our classifier and include more diversified data by adding stress and load on the systems being monitored. Collect data for a longer amount of time, tweak the data to include edge scenarios. Then train the model again to increase the accuracy of the tool and ensure an efficient service aware system that helps in migration decisions. Apart from this, a few more Alert rules will be configured and a thorough testing will be conducted of the proposed model. For the report, abstract, introduction, methods will be worked upon in the coming week. As the work progresses results, conclusions, tables will be added.

### **Q. Do I anticipate any obstacles, and can the team help me with them?**

As a team, we organised ourselves into a single task for everyone, we had 5 important things to work on. Exploring Grafana APIS for downloading data, using Prometheus and python to consolidate data though code, configure alert manager rules, select the metrics and a build a ml model, perform it's testing. Everyone worked on their parts and as the leader I ensured that very communicated and collaborated to clarify doubts and share the outputs. As such, challenges were faced but we overcame them.