

1. Description
 - 1.1. NFV
 - 1.2. Benefits
 - 1.3. Challenges
 - 1.4. "Related Works"
 - 1.5. Problems
 - 1.5.1. Reactive Scaling/Placement
2. Motivation
 - 2.1. Why do we need this thesis?
 - 2.1.1. No longer Reactive Scaling/Placement
 - 2.2. Are there possible areas where the algorithm with prediction could perform worse than the algorithm without prediction?
3. Gathering Data
 - 3.1. Finding suitable Network Traffic data for training and testing the models
4. Model building
 - 4.1. Comparisons of libraries
 - 4.1.1. Tensorflow
 - 4.1.2. Keras
 - 4.2. What parameters to use?
 - 4.2.1. Current Network Structure
 - 4.2.2. Target Nodes
 - 4.2.3. Requested Services
 - 4.2.4. Last time requested
 - 4.2.5. Time of Day
 - 4.2.6. Weekday
 - 4.2.7. etc...
 - 4.2.8. restrictions (What can the algorithm know)?
 - 4.3. What parameters to predict?
 - 4.3.1. Target Node
 - 4.3.2. Requested Service
 - 4.3.3. Time of Request
 - 4.4. What kind of models to use?
 - 4.4.1. recurrent neural networks (RNN)
 - 4.4.1.1. Long short-term memory (LSTM)
 - 4.4.1.2. Gated Recurrent Units (GRU)?
 - 4.4.1.3. Elman-RNN?
 - 4.4.1.4. Echo State Networks?
 - 4.4.1.5. ARIMA?

5. Integration
 - 5.1. Integrate prediction model with scaling algorithm.
6. Test and comparison
 - 6.1. Running with and without prediction and gathering results.
 - 6.2. Compare results.
 - 6.3. Evaluate Quality of prediction.
 - 6.4. Visualize test data?
7. Structure of the thesis
8. Timetable