Master’s thesis workflow/idea/work steps

Distilling multilingual translations and compressing models while keeping robustness

Flow:

1. Train seq2seq model for multilingual distillation of translation into one language
2. Evaluate performance
3. Compress model into smaller size
4. Evaluate performance changes
5. Compare performances

Worksteps:

1. Research seq2seq models for distillation
2. Research Multilingual distillation translation into one language
3. Find datasets
4. Edit datasets to fit the task
5. Create and train teacher model
6. Perform evaluation on performance, speed and storage space
7. Create downsized model and train it
8. Evaluate performance, speed and storage space changes
9. Repeat steps 7 and 8 depending on available work and time
10. Compare the changes and analyse common mistakes

New idea: multilingual code-switched translation -> how far is distillation reasonably possible?

Multiple gold label sentences?

* Fairseq library
* Opennmt-py