

Master Thesis Seminar Talk

Progress Update

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Lab Development and Application of Data Mining and Learning Systems:
Machine Learning and Data Mining

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- ▶ The precise research question of the master thesis has yet to be formulated
- ▶ General area: Based on my lab report '*Weisfeiler Lehman, Tree Metrics and the French Railway System*'
 - ▶ Implementation of a graph classification method
 - ▶ Using **Weisfeiler Lehman labels** and their **dependency-tree** T
 - ▶ Using **tree metrics** to derive a kernel from this tree T

- ▶ Expanding the lab report to a research paper
- ▶ Sketching the structure of the master thesis
- ▶ Literature research
- ▶ Defining a research question

- ▶ Research question
- ▶ Possible improvements for the existing code/ method (w.r.t. the research paper)

- ▶ Improve the code wrt to runtime
(e.g. python vectorization and structural improvements)
- ▶ Expand the representations in the lab report
(e.g. proofs and explanations)
- ▶ Literature research

Thank you all for listening.

I will be happy to answer any **questions** and
hear your **comments**.