

Hyper-minimization of finite state transducers

Senka Drobac

University of Helsinki

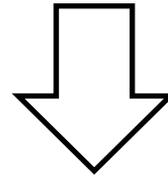
CLARA



The project

- Huge Greenlandic morphology:
 - Too big to compile on PC
 - Slow
 - Hard to debug
 - Cyclic
- Hyper-minimization – ideas:
 - Automatic flag diacritics
 - Division into smaller transducers
 - “lossy” compression

Flag diacritics



Evaluation

- Performance comparison
 - Size
 - Speed
- Accuracy
 - Comparison of analysis results
 - Generation - infinite
 - Removing flags - mathematical comparison