

Assignment 3

L545

Due Monday, February 18

1. Using foma, implement your Japanese FST from the last assignment.
2. Using foma, implement the Soundex algorithm you wrote in the last assignment.
3. Using foma, complete one of the exercises **of your choice** under *Additional exercises* at <http://www.stanford.edu/~laurik/fsmbook/home.html>
4. **[Bonus]** Take a look at this page describing syllabification in Finnish, in a foma-like framework:
<http://www.stanford.edu/~laurik/fsmbook/exercises/FinnishSyllabification.html>
 - (a) Following our discussion of composition from Roark & Sproat, rephrase the Syllabify rule, such that represents a transducer which composes on top of Finnish words.
 - (b) Describe the alterations to your transducer (or series of transducers) which must be made to account for the more complicated version of Finnish vowels given on this page. (Note: you are not being asked to implement this.)