

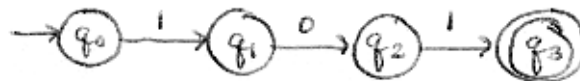
11-711: Algorithms for NLP

Recitation #3

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Power Set Construction for NDFSA's

The power set construction provides a way to build an equivalent DFSA A' for a given NDFSA A such that $L(A') = L(A)$. Given the following NDFSA A over $\Sigma = \{0, 1\}$,



build the equivalent DFSA A' .

Pumping Lemma for Regular Languages

For a string w , let us denote the reverse of w as w^R . (For example, if $w = 011$, then $w^R = 110$.) Use the Pumping Lemma to show that the language

$$L = \{ww^R \mid w \in \{0, 1\}^*\}$$

is not a regular language.