Deterministic Finite Automata (2.2)

• Definition

DFA: Set of states, input alphabet, transition function, start state, set of accepting states.

Usual notation: \( Q, \Sigma, \delta, ?? \) (I’ve seen “\( S \)”), \( F \).

Examples.
Representing DFAs

Transition diagrams (a.k.a. “state diagrams”).

Transition tables.
Extending the Transition Function & the Language of a DFA

From $\delta$ to $\hat{\delta}$.

Accepting a language.