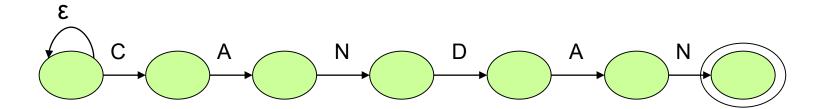
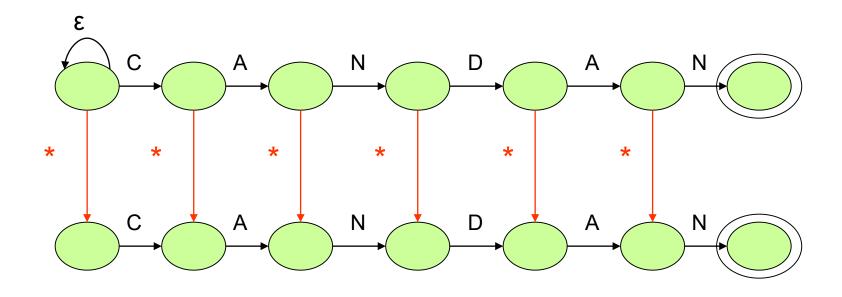
#### What about approximate matches?

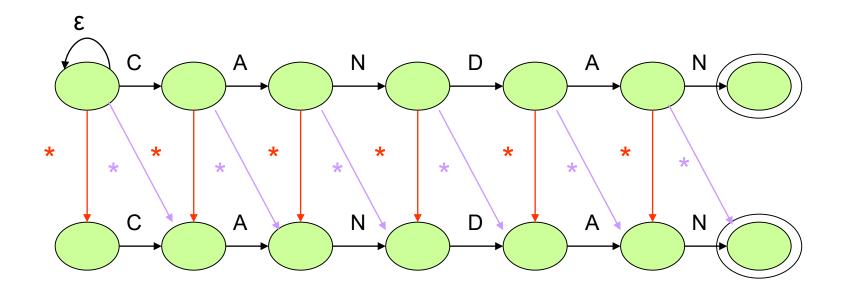
- Example
  - Pattern: CANDAN



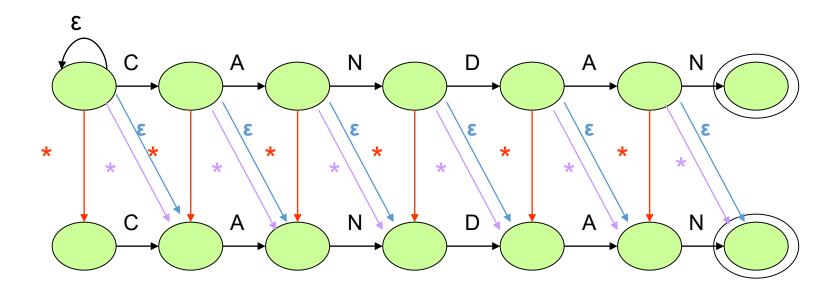
# NFA...upto 1 insertion



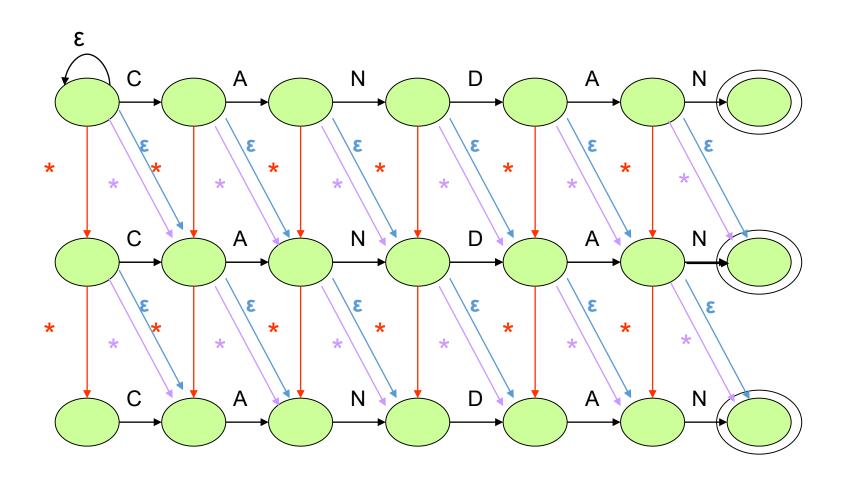
## NFA...upto 1 insertion\replacement



# NFA...upto 1 ins.\rep.\deletion



### NFA...upto 2 ins.\rep.\deletion



### Summary

- Prefix based sequence exploration:
  - Trie data structure helps prune the candidate set
- Subsequence search and exploration
  - Suffix trees and suffix arrays helps focus on the part of a long sequence
- Pattern matching
  - Non-deterministic finite automata can be used to support exact and approximate pattern matching