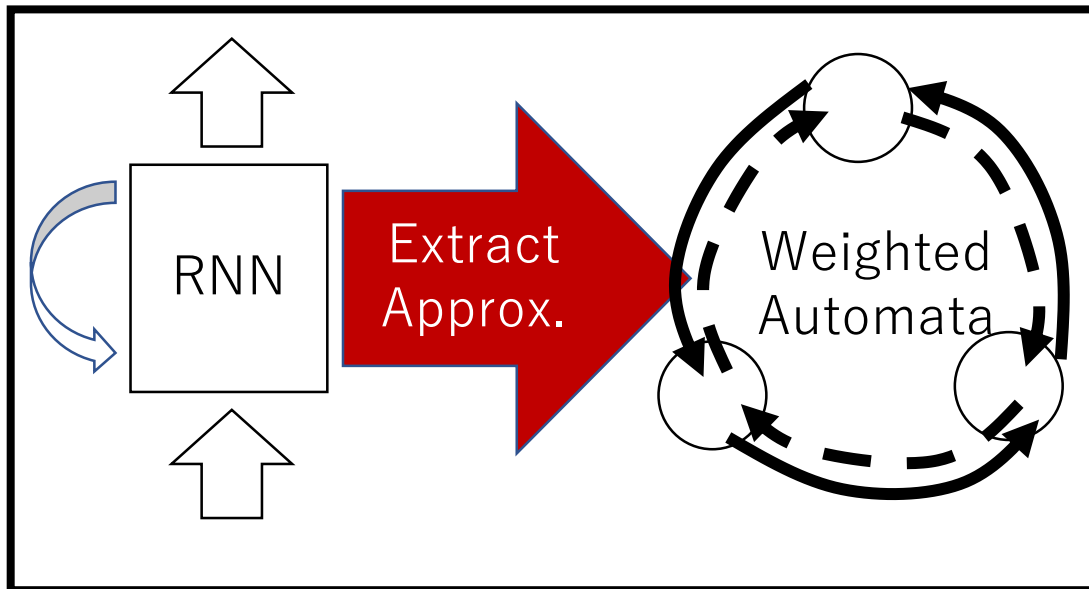# Weighted Automata Extraction from Recurrent Neural Networks via Regression on State Spaces
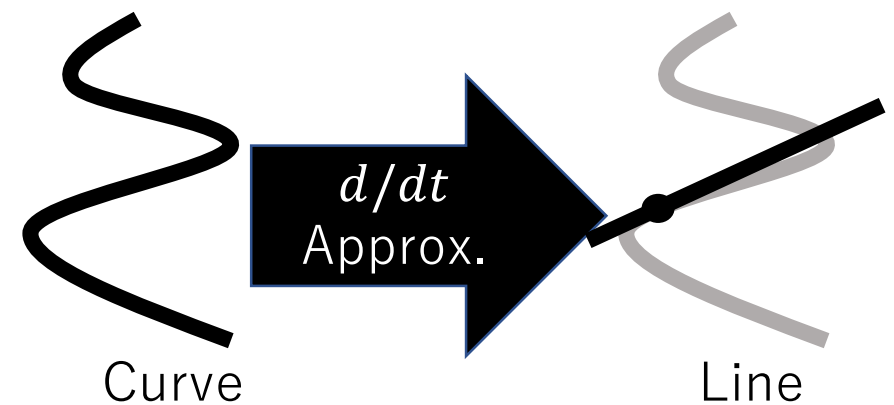
Takamasa Okudono, Masaki Waga, Taro Sekiyama, Ichiro Hasuo

Weighted Automata Extraction from Recurrent Neural Networks via Regression on State Spaces

(1) Extraction yields interpretability!

(2) About 1300x faster inference

(3) Our extraction by regression:
quick and accurate