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Problem

- Automatically generating sumi-e style drawings

Previous work (Ning et al., ICML2012)

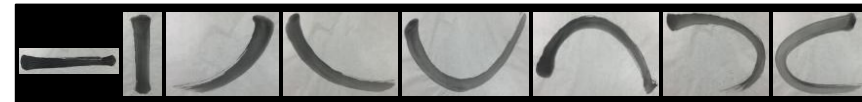
- A brush was regarded as a computer agent
- The brush agent was trained to generate smooth strokes using **reinforcement learning** under a **pre-designed cost function**

Target

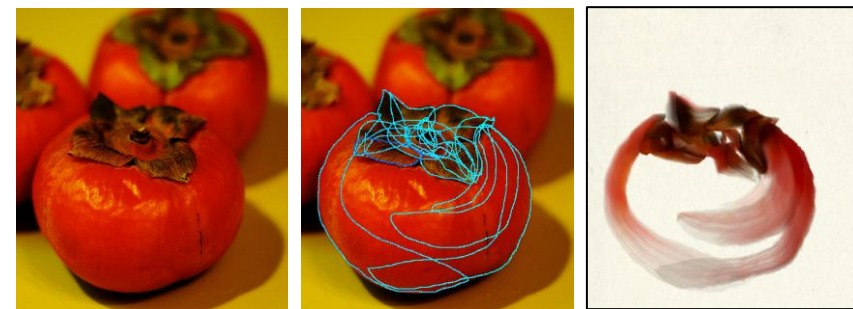
- Allow the brush agent to imitate the **personal drawing style** of a user

Our method

- We propose also **learn the cost function** from a user's real brush stroke data **by inverse reinforcement learning**



A part of the training data set



Results

Reference: Xie, N., Hachiya, H. and Sugiyama, M.: Artist Agent: A Reinforcement Learning Approach to Automatic Stroke Generation in Oriental Ink Painting, ICML (2012).