

OctoPocus

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11th July 2016

Overview

- 1 Introduction to the original paper
- 2 Own implementation
- 3 Live demo

Original Paper: Core Ideas

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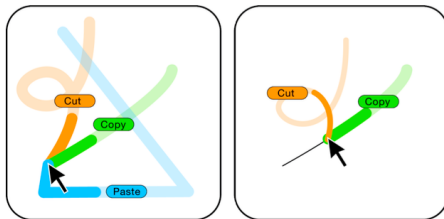
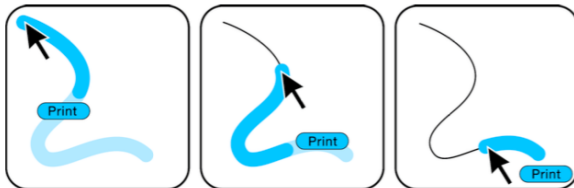


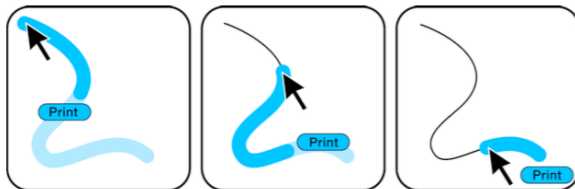
Figure: Left: Feedforward mechanism, Right: Feedforward and Feedback mechanism

Feedforward mechanism



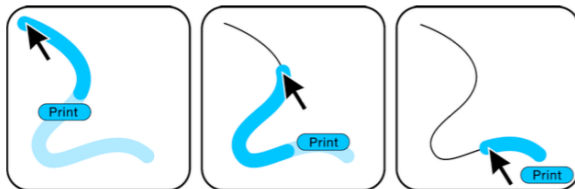
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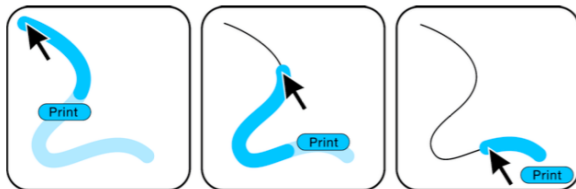
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- Each template gesture has a prefix starting at the cursor and marking a small part of the whole gesture in a deep color, the rest has the same but translucent color

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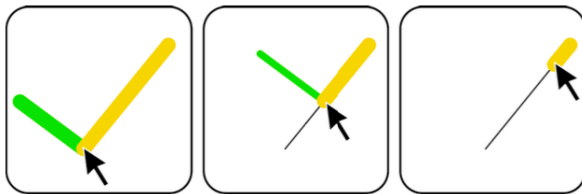
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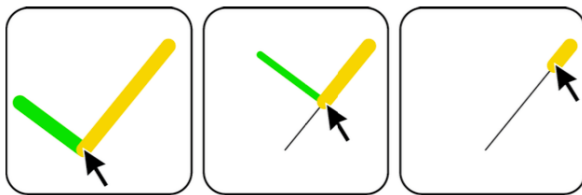
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- Disadvantage: Can take up a lot of screen space

Feedback mechanism



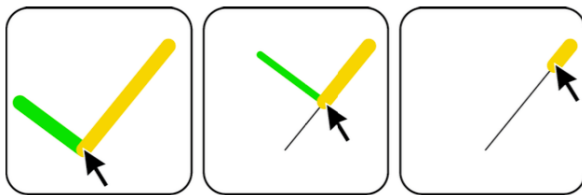
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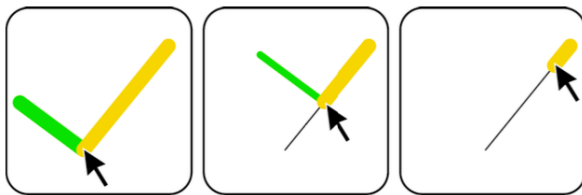
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- The distances sum up to a consumable error rate until the input can no longer be recognized as a member of a given gesture class
- The consumable error rate is also mapped onto the thickness of the gesture

Novice or Expert?

Novice version:

- All paths are displayed by doing a long click

Novice or Expert?

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Expert version:

- No paths are displayed

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- Novice and Expert mode

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- We are working with touch and not with a cursor
⇒ Occlusion problems when paths are spread into all directions
- One path is provided for the user to create his own gesture paths, replacing it with the old ones

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- Finding the right thresholds:
 - Paths can be drawn quite close to each other
 - Solution: Doing error calculation only in the area close to the finger
- Occlusion:
 - All paths point into different directions by default
 - Solution: Default paths can be modified by the “New Path “function, e.g. if the user is right-handed, he can draw all paths from the lower right to the left, upperleft and top direction

The End