

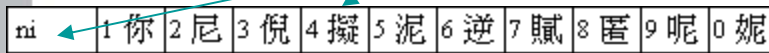
Chinese Phonetic Handwritten Text Input for Mobile Phones

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Our Solution

Unique “finger writing” Chinese text-input technology uses a standard-looking keypad that doubles as a capacitive touch surface.

Handwritten characters are pinyin or bopomofo symbols. They are easier to draw on a small size input area compared to ideogram (less strokes needed)



2-3 strokes

20-25 strokes

Tradeoff between an ease of input and selection:

Pinyin phonetic representation “ni” is common to 10 different Chinese ideograms. To get a desired ideogram the user must select one from the list.

Implementation

Demo platform: Nokia 7650 smart phone retrofitted with an integrated capacitive touch-sensitive input device mounted under a phone keypad.

More on mobile touch sensing technology: www.synaptics.com/products/mobto.cfm

Handwriting Recognition

Neural Networks recognizers for English (pinyin) and bopomofo alphabet. Neural Networks often outperform other pattern recognition techniques in cognitive tasks (e.g. handwriting, speech).

Synaptics recognizers are easy to use, user independent, accurate, robust, memory efficient, portable and easy to integrate with handset software.

Future work

Selection optimization: intonation symbols, Chinese language model, context

Recognized pinyin input

Ideogram/phrase selection

