Japanese HWR

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Contents

Chapter 1

Handwriting Recognition Engine

The sections of this chapter are more the result of a brainstorming than a proper thought-through chapter design. xxx: see santosh2009 for mathematical stuff: nice description of what I'm doing

1.1 Data Capturing

this should deal with how the data are captured during the process mouse coordinates and stuff

1.2 Data Format

how is the data structured? radicals, strokes, characters, xml-format

1.3 Database

where did I get it from? how many chars are in there? how are they accessible? what format? Jim Breen

1.4 Recognition Architecture

-> Modules and parts of HWR, create graphic.
s. 18 zeichen, punkt usw. UML diagramme.

1.5 Stroke recognition process

1.5.1 Advanced Point Lists

1.5.2 Normalisation

1.5.3 Boxing

how is boxing done? show requirements. what alternatives were there to consider?

1.5.3.1 Scaling

s. 42-45 how is scaling done? show requirements. what alternatives were there to consider?

1.5.4 Curve Handling

how is curver handling done? show requirements. what alternatives were there to consider?

1.5.5 Dynamic Time Warping

s. 51 how is dynamic time warping done here? pointer to papers or hwr - chapter, don't explain DTW here. show requirements why DTW? what alternatives were there to consider? none - it is the alternative. to all the other stuff I've been doing. however, what about 3D time warping?

1.6 Radical recognition process

what about stroke number and stroke sequence? why deal with it? can be dealt with? how? why this way, why not another way?

generally, how is radical recognition done? show requirements. what alternatives were there to consider?

1.7 Character recognition process

s. 24 pseudocode s. 9/10 pixelwolke vs. reihenfolge

1.8 Error recognition

1.8.1 How to deal with typical errors when writing Japanese

1.8.1.1 Error recognition

focus on technical aspects

1.8.1.2 Error handling

focus on technical aspects

1.9 HWR applied to e-learning of Japanese Kanji

1.9.1 Integration of HWR into e-learning app

educational aspects / the e-learning view

1.9.2 Error handling

educational aspects / the e-learning view

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