

A Pen-based Handwriting Interface for Algebraic Expressions Input/Edit

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Abstract

We had developed a prototype of pen-based handwriting interface for mathematical expressions input/edit, which is applied as a user interface to an ITS (Intelligent Tutoring System) guiding algebraic calculation. Pen-based handwriting input enables an user enters mathematical expressions directly on an LCD pen tablet. Gestures enable an user executes ordinary editing operations (e.g. select, overwrite, erase, move and paste) directly with a pen instead of keyboard and mouse. Expression editing include symbol editing and sub expression editing, which are applied to correct symbol recognition errors and calculation mistakes respectively. Therefore, a natural and convenient handwriting mathematical expression input/edit environment can be expected.