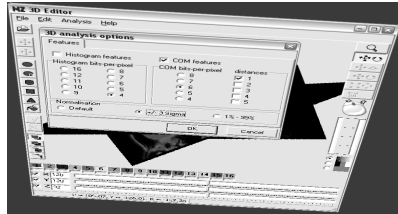# Report on Software
MaZda 4.2

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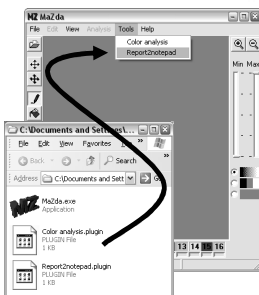**COST B21 Conference, 2006.04.xx**

What's new

⌘ Plugins
⌘ New instructions for MaZda macros
⌘ Extension of 3D Editing tools
⌘ 3D image analysis capabilities
⌘ Modification of a report format
⌘ New feature selection methods
⌘ Unsupervised image segmentation
⌘ New MaZda manual

Plugins

*Plugins are implemented in MaZda through its macro technology. Macro files given a ".plugin" extension, located in MaZda's working directory are recognized as plugins, and are accessible from the MaZda menu. The new **Execute** command lets to execute other programs.*

Macro instructions

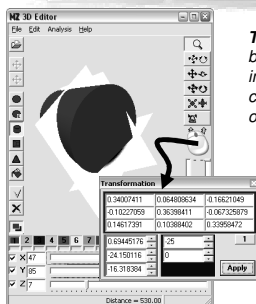*There are new instructions, which may be used in MaZda macros:*
***Execute** - executes other program,*
***SaveImage** - to save an image (bmp, dicom, raw),*
***LoadReport** - to load a report,*
***SaveSelected** - to save selected features.*
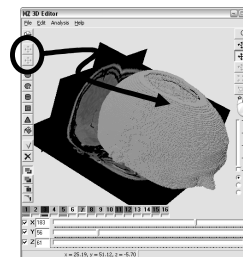

3D Editing tools

***Transformation** toolbox is invoked by double-clicking on the mouse image. With the toolbox it is easy to control location, size and orientation of a region of interest block.*

3D Editing tools
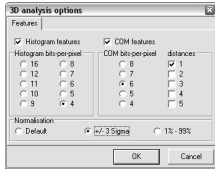

*Now with **Move** or **Copy** tools it is possible to move or copy a 3D region of interest that was already created.*

3D Analysis

Procedures for 3D image normalization and textural analysis have been implemented. The methods based on co-ocurrence matrix and histogram analysis are available.

Report format

The features, which should not be considered for selection and further analysis (e.g. normalization parameters or area) have been added an underscore (_) prefix.
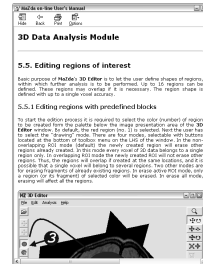
Feature selection

New supervised feature selection method, based on optimal subsets of features, provides minimal 1-NN classification error. These subsets contain one, two or three features

MaZda Manual

*The new MaZda **manual** includes issues of 3D image analysis, editing of 3D regions of interest, MaZda plugins and macros, new feature selection procedures, and unsupervised methods for feature selection and image segmentation.*

Known bugs

Dicom files saved by MaZda are not readable by some other software. Analysis does not start on computers with little memory.

Future work

Plugin system is to be tested with Scopira.

2