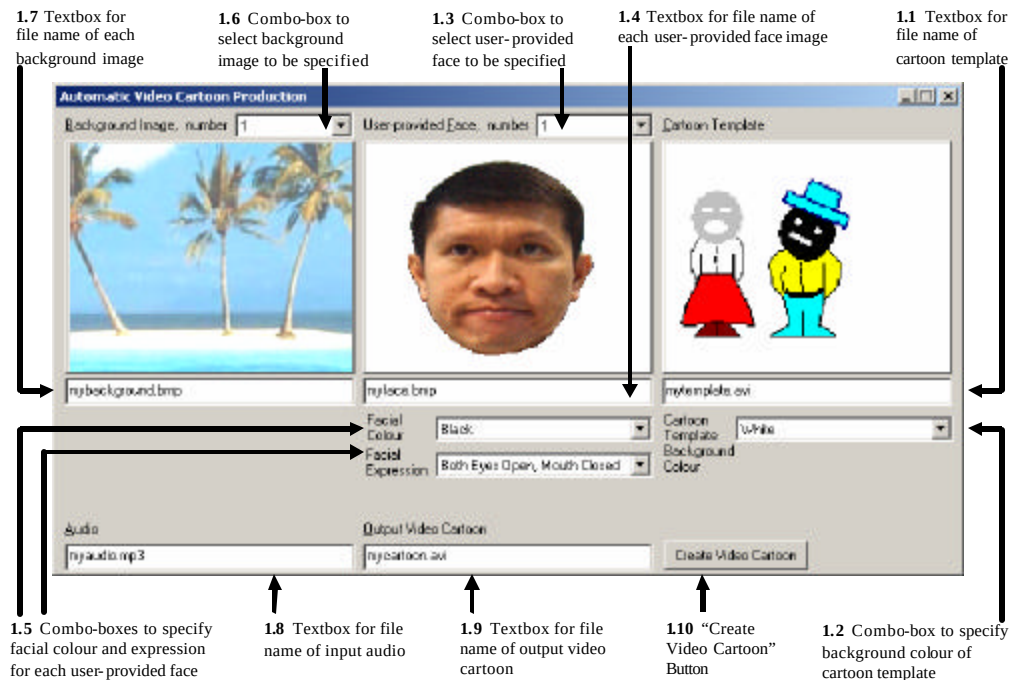


TITLE

Method for Automatically Producing Video Cartoon with Superimposed Faces from Cartoon Template



ABSTRACT

The invention is a method for automatically producing video cartoons with user-provided faces superimposed on cartoon characters. A cartoon template stores the original video cartoon with unanimously-coloured backgrounds and original cartoon characters' faces drawn following the guidelines of the invention. A background detection algorithm is used to detect the unanimously-coloured backgrounds, while a face detection algorithm is used to detect the facial colours, facial expressions, sizes, rotations, positions and clippings of the original cartoon characters' faces. The detected unanimously-coloured backgrounds may then be replaced by optional user-provided backgrounds. User-provided faces with the best matching user-specified facial colours and expressions are then superimposed over and on top of the corresponding original faces of the cartoon characters at the detected sizes, rotations, positions and clippings to produce the final video cartoon. The cartoon template can be distributed to many different users. With the invention, different users can add different user-provided faces, background images and audio to the same cartoon template to produce many different final video cartoons.