

Development of eye fixation points prediction model from eye tracking data using neural network

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Abstrak

Fixation points, as the stopping location of eye movements, can be extracted to generate valuable information about a picture or an object. This information is valuable as it enables the identification of the area/part of the picture that attracts people's attention, which can be used as a consideration when making decisions in the future, for example in marketing. For this reason, in this study, a Neural Network (NN) model was developed to predict the fixation points of a picture. Specifically, the authors experimented with various transfer and training functions in the NN in order to determine which causes the fewest errors. The results show that the method used is applicable in practice since it produces MAPE (Mean Absolute Percent Error) of around 13–15% and MSE (Mean Squared Error) of 0.9–1.1%.