**Neural Networks for spectral-based printer characterization**

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*The quality of color printed images is usually evaluated by the mean of color deviation between printed and original colorimetric values. This approach can not consider the metameric phenomena caused by the different illuminants. The spectral-based printer characterization has an advantage as far as the reproduced colors are described by their spectral reflectance which is independent of observation conditions.*

*The present study applied neural networks as an effective method for empirical spectral printer characterization. The printer was treated as a RGB device and two randomly distributed in RGB color space testcharts were created. The charts were printed using driver which employs Floyd Steineberg dithering.*

*Feed-forward neural network trained with backpropagation was used to predict reflectance from colorant information. An optimal architecture was established based on computed results of 10 different networks. Results reported in terms of calculated color difference showed accurate mapping between measured and predicted colors*.

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