

Image Segmentation Using Hidden Markov Models and convolutional neural network

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- Artificial neural networks (ANNs) reflect the behavior of the human brain, allowing computer programs to recognize patterns and solve common problems in the fields of Artificial Intelligence. Bayesian methods have been applied in recent years to neural networks by various authors MacKay1992, MacKay92, Neal1992, Mangi2018, Zhaoying2020, Gao2021. In this work, We propose to use hidden Markov model (HMM) to weight the fields and finally use convolutional neural network (CNN) segment images. Promising experiment results are achieved on the RGB-D images.

Joint work with: AFIFI Mohames, AMAR Said.

References

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