Advanced Science and Technology Letters
Vol.75 (SIP 2014), pp.9-12
http://dx.doi.org/10.14257/astl.2014.75.03

Images Enhancement using Spinning Effect

Kyungho Won and Gwanggil Jeon

[1]Department of Embedded Systems Engineering, Incheon National University,
12-1 Songdo-dong, Yeonsu-gu, Incheon 406-772, Korea
gjeon@incheon.ac.kr

Abstract. This paper proposes a spinning effect method for existing dataset. Two parameters are employed for the proposed system, and both parameters are transformed into polar coordinate. Experimental results give performance comparison and discovered results.

Keywords: Spinning effect, image processing, signal transform, revisable coming, performance metric

1 Introduction

Signal is represented as a matrix or an array, which is generally structured as square formed pixel sets ordered in columns and rows [1,2]. For example, in grayscale image, each pixel is organized with eight bit symbol, and its corresponding intensity value is [0,255]. Intensities 0 and 255 stand for black and white pixels. When the number of channels is more than 3, images are called as color images [3-7]. Figure 1 shows an example of spinning effect.

This paper is organized as follows. Section 2 discusses proposed spinning operation. Section 3 shows experimental results. Finally, conclusion remarks are given in Section 4.

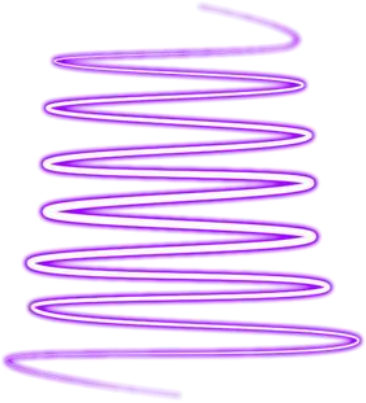


Fig. 1. Two examples of spinning effect [8, 9]

ISSN: 2287-1233 ASTL

2 Proposed spinning operation

The flowchart of the proposed method is shown in Fig. 2.

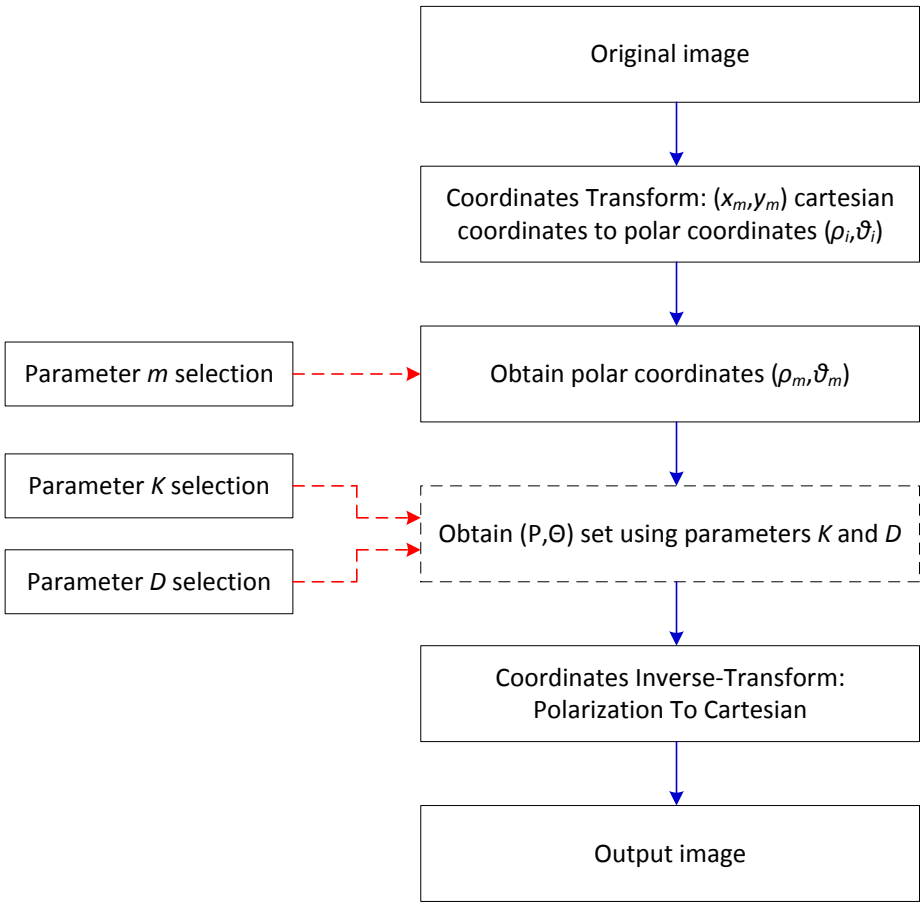


Fig. 2. Flowchart of the proposed method.

3 Simulation Results

Experimental reesults are given in this section. Test images are Zahra imageset, which is shown in Fig. 3. Figure 4 shows resut images.

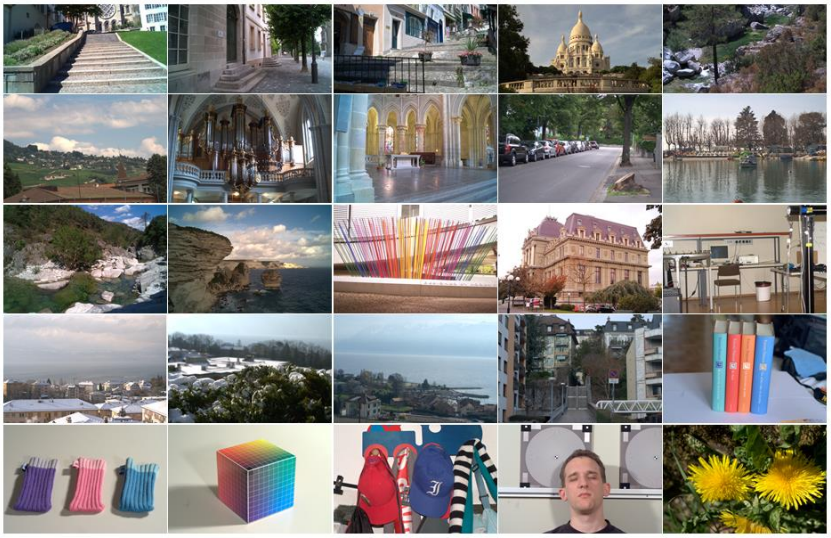
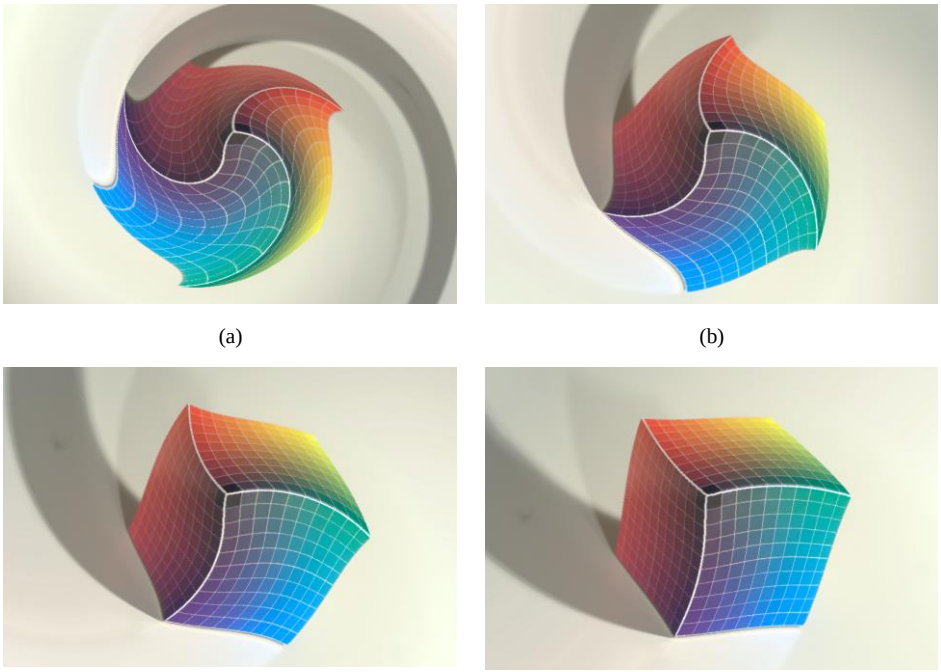


Fig. 3. Tested dataset for the proposed method.



(a) (b)

(c) (d)

Fig. 4. Conducted simulation results images on image #22 with K=1: (a) D=100, (b) K=200, (c) K=400, and (d) K=800.

4 Conclusions

This paper discusses a method to create spinning effect in existing dataset.

Acknowledgment. This work was supported by the National Research Foundation of Korea (NRF) Grant funded by the Korean Government (MSIP)(2014025627)

References

1. Cong Jin, Qing-Hua Deng and Jun Liu, "Computer Virus Propagation Model Based on Variable Propagation Rate," IJAST, vol. 1, pp. 29-34, December 2008.
2. Ching-Tang Hsieh, Yeh-Kuang Wu, and Kuo-Ming Hung, "Hybrid Watermarking Scheme for Halftone Images," IJAST, vol. 1, pp. 9-20, December 2008.
3. G. Jeon, M.Y. Jung, M. Anisetti, V. Bellandi, E. Damiani, and J. Jeong, "Specification of the geometric regularity model for fuzzy if-then rulebased deinterlacing," IEEE/OSA Journal of Display Technology, vol. 6, no. 6, pp. 235–243, June 2010.
4. G. Jeon, M. Anisetti, V. Bellandi, and J. Jeong, "Fuzzy rule-based edge-restoration algorithm in HDTV interlaced sequences," IEEE Trans. Consumer Electronics, vol. 53, no. 2, pp. 725–731, May 2007.
5. G. Jeon, M. Anisetti, J. Lee, V. Bellandi, E. Damiani, and J. Jeong, "Concept of linguistic variable-based fuzzy ensemble approach: application to interlaced HDTV sequences," IEEE Trans. Fuzzy Systems, vol. 17, no. 6, pp. 1245–1258, Dec. 2009.
6. Y. M. Lu, C. Fredembach, M. Vetterli, and S. Susstrunk, "Designing color filter arrays for the joint capture of visible and near-infrared images," in Proc. of IEEE International Conference on Image Processing, 2009, pp. 3797-3800.
7. X. Zhang, T. Sim, and X. Miao, "Enhancing photographs with near infra-red images," in IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2008.
8. Available: http://www.sampaikini.com/swirls-lines-colorful-spiral-x-wallpapers/
9. Available: http://ranawaqasrockstar.blogspot.kr/2012/05/swirl-effects-for-photo-editing-and-for.html

