Publications

Book Chapters

1. C. Weerasinghe, H. Yan, L. Ji, "Rotational Motion Artifact Suppression Based on Fuzzy POCS", *Signal Processing for MRI and MRS*, Chapter 5, Marcel Dekker Publishers, New York, accepted for publication in 2000.

Journal Publications

1. C. Weerasinghe, L. Ji, H. Yan, "A new method for ROI extraction from motion affected MR images based on suppression of artifacts in the image background", *Signal Processing* Vol. 80 (5), 867-881, 2000.

2. C. Weerasinghe, H. Yan, L. Ji, "A fast method for estimation of object rotation function in MRI using a similarity criterion among k-space overlap data", *Signal Processing*, Vol. 78 (2), 215-230, 1999.

3. C. Weerasinghe, H. Yan, "An improved algorithm for rotational motion artifact suppression in MRI", *IEEE Trans. on Medical Imaging* Vol. 17 (2), 310-317, 1998.

4. C. Weerasinghe, H. Yan, "Correction of motion artifacts in MRI caused by rotations at constant angular velocity", *Signal Processing* Vol. 70 (2), 103-114, 1998.

Conference Publications

1. C. Weerasinghe, L. Ji, H. Yan, "ROI extraction from motion affected MR images by suppression of blurring and motion artifacts in the image background", *Proc. of 5th International Symposium on Signal Processing and its Applications (ISSPA'99)*, Vol. 1, 279 - 282, Brisbane Australia, 22 - 25 August 1999.

2. C. Weerasinghe, L. Ji, H. Yan, "ROI extraction from motion affected MRI images based on fuzzy and active contour models", *Proc. of 1999 International Conference on Acoustics, Speech and Signal Processing (ICASSP'99)*, Vol. 6, 3405 - 3408, Pheonix Arizona USA, 15 - 19 March 1999.

3. C. Weerasinghe, L. Ji, H. Yan, "A novel motion estimation scheme for rotational motion artifact suppression in MRI", *Proc. of the Inaugural Conference of the Victorian Chapter of IEEE EMBS*, 19 - 23, Melbourne Australia, 22 - 23 February 1999.

4. C. Weerasinghe, H. Yan, "Suppression of rotational motion artifacts in MRI using a fuzzy data model and POCS with soft constraints", *Proc. 20th Annual International Conference of the IEEE EMBS*, Vol. 20 part 2/6, 640 - 643, Hong Kong, 29 October - 1 November 1998.

5. C. Weerasinghe, H. Yan, "Image reconstruction based on fuzzy POCS", *Proc. 1998 Symposium on Image, Speech, Signal Processing and Robotics (ISSPR'98)*, Vol. 2/2, 169 - 174, Hong Kong, 3 - 4 September, 1998.

6. C. Weerasinghe, H. Yan, "Rotational motion artifact correction in MRI", *Proc. of 6th Scientific Meeting and exhibition of the International Society for Magnetic Resonance in Medicine (ISMRM'98)*, Vol. 3/3, 2113, Sydney Australia, 18 - 24 April, 1998.

7. C. Weerasinghe, H. Yan, "A POCS based algorithm for rotational motion artifact correction in MRI", *Proc. of 1997 Pan-Sydney Area Workshop on Visual Information Processing (VIP'97)*, 5 - 10, Sydney Australia, 3 December, 1997.

8. C. Weerasinghe, H. Yan, "Rotational motion artifact correction in MRI", *Proc. of 1996 Pan-Sydney Area Workshop on Visual Information Processing (VIP'96)*, 83 - 89, Sydney Australia, 25 November, 1996.

9. W.A.C. Perera, J. F. Chicharo, B. S. P. Perera, "On the merits and demerits of using a fast Fourier transform approach for establishing the harmonic spectrum in power systems", *Proc. of Australasian Universities Power Engineering Conference (AUPEC'93)*, Vol. 1/2, 108 - 115, Wollongong Australia, 29 September - 1 November, 1993.

Papers Submitted

1. C. Weerasinghe, H. Yan, "K-space correction of rotational motion affected MR data using fuzzy POCS", under review by *Fuzzy Sets and Systems*.