

Zhang (John) Chen

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OBJECTIVE: To obtain a Post-doc position in the field of brain image studies.

EDUCATION:

PhD Biomedical Engineering

McGill University, Montreal, Quebec, Canada

2005 – present

Research area: MRI, neocortex, connectivity, graph-theory, morphometry, aging, AD

M.E.Sc. Electrical & Computer Engineering

University of Western Ontario, London, Ontario, Canada

2002 – 2004

Research area: Image Processing, Pattern Recognition, 3D Modeling

B.E.Sc. Electrical & Computer Engineering

University of Western Ontario, London, Ontario, Canada

1996 – 2001

B.Sc. Computer Science

University of Western Ontario, London, Ontario, Canada

1996 – 2002

WORK EXPERIENCE:

Research Assistant

Montreal Neurological Institute, Montreal, Quebec, Canada

2004 – 2005

Teaching Assistant - Faculty of Engineering Science

The University of Western Ontario, London, Ontario

2002 – 2003

Test Engineer – Advanced System Business Unit (ASBU)

Celestica Inc, Toronto, Ontario

1999 – 2000

Publications:

Z J Chen, Y He, P Rosa-Neto, G Gong, A C Evans (2010) Age-related alterations in the modular organization of structural cortical network by using cortical thickness from MRI. Neuroimage, in press.

Z J Chen, Y He, P Rosa-Neto, J Germann, A C Evans (2008) Revealing modular architecture of human brain structural networks by using cortical thickness from MRI. Cereb Cortex 18: 10. 2374-81.

B C Bernhardt, **Z Chen**, Y He, A C Evans, N Bernasconi, A Bernasconi (2010) Cross-sectional and longitudinal analyses demonstrate a cumulatively disrupted cortical network organization in temporal lobe epilepsy. *Cereb Cortex*, Accepted.

Y He, **Z Chen**, G Gong, A Evans (2009) Neuronal networks in Alzheimer's disease. *Neuroscientist* 15(4): 333-50.

Y He, **Z Chen**, A Evans (2008) Structural insights into aberrant topological patterns of large-scale cortical networks in Alzheimer's disease *J Neurosci* 28: 18. 4756-66.

Y He, **Z J Chen**, A C Evans (2007) Small-world anatomical networks in the human brain revealed by cortical thickness from MRI. *Cereb Cortex* 17: 10. 2407-19.

L Fan, Y Tang, B Sun, G Gong, **Z J Chen**, X Lin, T Yu, Z Li, AC Evans, S Liu (2010) Sexual Dimorphism and asymmetry in human cerebellum: an MRI-based morphometric study. *Brain Research* 1353:60-73.

C Yan, G Gong, J Wang, D Wang, D Liu, C Zhu, **Z J Chen**, A C Evans, Y Zang, Y He (2010) Sex- and Brain Size-Related Small-World Structural Cortical Networks in Young Adults: A DTI Tractography Study. *Cereb Cortex*, 21(2): 449-458.

G Gong, P Rosa-Neto, F Carbonell, **J Chen**, Y He, A Evans (2009) Age- and gender-related differences in the cortical anatomical network. *J Neurosci* 29(50): 15684-15693.

Fahim C, Yoon U, Das S, Lyttelton O, **Chen J**, Arnaoutelis R, Rouleau G, Sandor P, Frey K, Brandner C, Evans AC (2009). Somatosensory-motor bodily representation cortical thinning in Tourette: Effects of tic severity, age and gender. *Cortex*, 46(6): 750-760.

Y He, A Dagher, **Z Chen**, A Charil, A Zijdenbos, K Worsley, A Evans (2009) Impaired small-world efficiency in structural cortical networks in multiple sclerosis associated with white matter lesion load. *Brain* 132(Pt 12): 3366-3379.

Y He, J Wang, L Wang, **Z Chen**, C Yan, H Yang, H Tang, C Zhu, Q Gong, Y Zang, A Evans (2009) Uncovering intrinsic modular organization of spontaneous brain activity in humans. *PLoS ONE* 4: (4). e5226.

J Wang, L Wang, Y Zang, H Yang, H Tang, Q Gong, **Z Chen**, C Zhu, Y He (2009) Parcellation-dependent small-world brain functional networks : A resting-state fMRI study *Hum Brain Mapp* 30: 5. 1511 – 1523.

A Evans, J Lee, S Kim, H Fukuda, R Kawashima, Y He, T Jiang, J Kim, **Z Chen**, K Im, O Lyttelton, J Lerch, V Singh, K Sato, Y Taki, R Goto, S Kinomura, K Mok, U Yoon (2008) Human cortical anatomical networks assessed by structural MRI. *Brain Imaging and Behavior* 2: 289-299.

Publications (submitted/in preparation):

Z J Chen, Y He, G Gong, P Rosa-Neto, LZ Fan, A C Evans (2010) Abnormal modular organization of structural cortical network in Alzheimer’s disease. in revision.

G Gong, Y He, **Z Chen**,, A C Evans (2010) Convergnce and divergence of thickness correlation with anatomical connectivity across the cerebral cortex. in preparation.

Conference oral presentation:

Z J Chen, Y He, G Gong, P Rosa-Neto, LZ Fan, A C Evans. (2010) Abnormal modular organization of structural cortical network in Alzheimer’s disease. 62nd American Academy of Neurology Annual Meeting, Toronto, Canada.

Conference papers:

John Chen, Jagath Samarabandu, “Augmenting Range Data Obtained from Stereoscopy with Model-based Image Segmentation Using Planar Patches”, *IS&T/SPIE’s Symposium on Electronic Imaging: Science & Technology*, IS&T/SPIE 16th International Symposium, San Jose, California, USA, Jan. 2004.

John Chen, Jagath Samarabandu, “Planar Region Depth Filling using Edge Detection with Embedded Confidence technique and Hough Transform”, *IEEE International Conference on Multimedia & Expo (ICME)*, Baltimore, USA, AIVP-P1: Image Processing I, 89-92, July 2003.

AWARDS:

Certificate of Excellence – Finalist Standing in Student Technical Night	2001
The Alexander Charles Spencer Scholarship	1996

Memberships:

Organization for Human Brain Mapping
American Academy of Neurology