VITA

NAME Xin Zhang

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EDUCATION

Ph.D. student in Biomedical Engineering
Department of Biomedical Engineering, The University of Minnesota
2004 – Present
Expected graduation date: July 2005

Ph.D. candidate in Bioengineering
Department of Bioengineering, The University of Illinois at Chicago
1999 - 2003.

Master of Science in Biomedical Engineering
Department of Biomedical Engineering, Zhejiang University, China, 1999

Bachelor of Science in Biomedical Engineering
Department of Biomedical Engineering, Zhejiang University, China, 1996

EXPERIENCE

Research Assistant (1999 – Present)
Biomedical Functional Imaging & Computation Laboratory
Department of Biomedical Engineering
The University of Minnesota (2004 – Present)
Departments of Bioengineering & Electrical Engineering & Computer Science, the University of Illinois at Chicago (1999 – 2003)

- Conducted computer modeling, simulation, and programming
- Directed human and phantom experiments, assisted in animal experiment
- Coordinated research projects, trained and supervised graduate and undergraduate students

Teaching Assistant (1999 – 2002)
Departments of Bioengineering & Electrical Engineering & Computer Science, The University of Illinois at Chicago

- Teaching assistant for courses: Neural Engineering II, Pattern Recognition.
- Guest lecturer for courses Pattern Recognition, Special Topic in Bioengieering.

HONORS

The Rosanna Degani Young Investigator Award, Computers in Cardiology 2004
BMEI Poster Award, Medical Alley third annual conference, 2004

UIC graduate student travel award 2002
UIC graduate student travel award 2002
UIC graduate student council travel award 2002
Ranked No.1 in UIC Bioengineering Qualify Exam, 2001
UIC international student service award, 2001
Mixed Class of Zhejiang Univeristy, 1992-1994, (elite class for top 5% students at Zhejiang University)

PROFESSIONAL MEMBERSHIP

IEEE student membership
IEEE/EMBS student membership
Organization of Human Brain Mapping student membership
Society for Neuroscience student membership
Biophysics Society student membership

JOURNAL PUBLICATIONS

1. **Zhang X**, Ramachandra I, Liu Z, Muneer B, Pogwizd SM, He B, Noninvasive Three-Dimensional Electrocardiographic Imaging of Cardiac Activation Sequence, submitted to Circulation

2. He B, **Zhang X**, Lian J, Sasaki H, Wu D, Towle V, Boundary Element Method-Based Cortical Potential Imaging of Somatosensory Evoked Potentials Using Subjects' Magnetic Resonance Images, NeuroImage 16, No 3a, 2002: 564-576

3. **Zhang X**,van Drongelen W, Hecox K, Towle V, Frim D, McGee A, Lian J, He B, Localization of epileptic foci by means of cortical imaging using a spherical head model, NeuroComputing, 52-54 (2003) 977-982

4. **Zhang X**, van Drongelen W, Hecox K, Towle V, Frim D, McGee A, He B, High resolution EEG: Cortical Imaging of Interictal Epileptiform Spikes, Clin. Neurophysiol., 114 (2003) 1963-1973 (See Editorial by F. Babiloni at 1775-1780)

5. He B, Li G, **Zhang X**, Noninvasive three-dimensional activation time imaging of ventricular excitation by means of a heart excitation model, Phys. Med. Biol. 47 (2002) 4063–4078

6. Li. G, **Zhang X**, Lian J., He B., Noninvasive Localization of the Site of Origin of Paced Cardiac Activation in Human by Means of a 3D Heart-model, IEEE Trans. Biomed. Eng., Vol. 50, No. 9, 1117-1120, 2003

7. He B, Li G, **Zhang X**, Noninvasive Image of Cardiac Transmembrane Potentials within Three-dimensional Myocardium by means of a Realistic Geometry Anisotropic Heart Model, IEEE Trans. Biomed. Eng., Vol. 50, No. 10, 1190-1202

8. Liu F, Xia L, **Zhang X**, Analysis of the Influence of the Electrical Asychrony on Regional Mechanics of the Infarcted Left Ventricle Using Electromechanical Heart Models. JSME International, Vol. 46, No. 1, 1-9, 2003

CONFERENCE PUBLICATIONS

1. **Zhang X**, Ramachandra I, Liu ZM, Muneer B, Pogwizd SM, He B, Noninvasive Imaging of 3-Dimensional Cardiac Activation Sequence from Body Surface Potential Maps, 49th Biophysical Society Annual Meeting, 2005

2. **Zhang X**, Ramachandra I, Liu ZM, Muneer B, Pogwizd SM, He B, 3-Dimensional Activation Sequence Reconstruction from Body Surface Potential Maps by means of a Heart-Model-Based Imaging Approach, Computers in Cardiology, 2004

3. **Zhang X**,van Drongelen W, Hecox K, Towle V, Frim D, McGee A, He B, Cortical Imaging and Localization of Epileptiform Activity by means of a Realistic Geometry Geometry Head Model, 25th Annual International Conference of the IEEE Engineering in Medicine and Biology Society, 2003

4. **Zhang X**,van Drongelen W, Hecox K, Towle V, Frim D, McGee A, He B, Cortical Imaging of Epileptiform Activity by means of a Realistic Geometry Inhomogeneous Head Model, 4th International Conference on Noninvasive Functional Source Imaging, Italy, 2003

5. **Zhang X**,van Drongelen W, Hecox K, Towle V, Frim D, McGee A, He B, Cortical Imaging of Epileptiform Activity from Interictal Spikes in Pediatric Epilepsy Patients, Neuroscience 33rd Annual Meeting, 2003, Poster (accepted)

6. **Zhang X**,van Drongelen W, Hecox K, Towle V, Frim D, McGee A, He B, Cortical Imaging and Localization of Epileptiform Activity by means of a Realistic Geometry Inhomogeneous Head Model, Human Brain Mapping 2003, New York City, poster

7. **Zhang X**,van Drongelen W, Hecox K, Towle V, Frim D, McGee A, Lian J, He B, Localization of epileptic foci by means of cortical imaging using a spherical head model, 11th Annual Computational Neuroscience Meeting, 2002, poster

8. **Zhang X**, van Drongelen W, Hecox K, Towle V, Frim D, McGee A, Lian J, He B, Cortical imaging of interictal epileptiform activity using an inhomogeneous spherical head model. Internatial Journal of Bioelectromagnetism, 2002: 259-260

9. **Zhang X**, Towle V, Sasaki H, Lian J, Li G and He B, An experimental study on BEM-based cortical imaging of human SEP activity. Proc. of IEEE-EMBS, 2001, on CD

10. **Zhang X**, Sasaki H, Towle VL, Alperin N., Lian J, and He B. Development of a MATLAB based software system for realistic geometry BEM head modeling. Proc. IEEE-EMBS Asia-Pacific Conf. Biomed. Eng., 682-683, 2000