

Zhao Zhang

EDUCATION

- 1994-1997 Ph. D. EE (Electrical Engineering), University of Missouri-Rolla, Rolla, MO, USA
Dissertation: Automatic Skin Tumor Segmentation and Diagnosis
- 1990-1993 M.S. BME (Biomedical Engineering), Chinese Academy of Medical Sciences, Beijing, China
Thesis: A CT (Computerized Tomography) Medical Image Management System Based on PC
- 1985-1990 B.S. EE (Electrical Engineering), Tsinghua University, Beijing, China
Thesis: A Novel Pipeline Algorithm for Ultrasound Medical Imaging Systems.

EMPLOYMENT

- 1998-current Associate Professor (started as Assistant Professor), Missouri Western State University, St. Joseph, MO
Taught courses related to telecommunications, computer networks, microcomputer design, programming languages, and digital/analog circuits.
- Summer 1996 Software Design Engineer, Legal Support Services, The LAN Company, Boston, MA.
Designed a Windows interface for the database search engine DATAVISION 3.0
- 1993-1994 Visiting Scholar, Dept. of Electrical & Computer Engineering, Univ. of Missouri-Rolla.
Proposed and implemented a novel automatic skin tumor center marking algorithm.

RESEARCH INTERESTS

- Image and signal processing
- Neural Networks and pattern recognition
- Computer network, wireless network, 2G/3G cell phone network
- Biomedical instrumentation

PAPERS

- Z. Zhang, W. V. Stoecker, and R. H. Moss, "Border Detection on Digitized Skin Tumor Images", IEEE Trans on Medical Imaging, Vol. 19, No. 11, pp1128-1143, 2000.
- W. V. Stoecker, Z. Zhang and R. H. Moss, "Boundary Detection Technique in Medical Image Processing", Invited Chapter for Medical Imaging Techniques and Applications, Gordon & Breach Int'l Series in Engineering Technology and Applied Science, Ed: Cornelius T. Leondes, Gordon & Bleach, Newark, NJ, pp1-84, 1996.

PRESENTATIONS

- Z. Zhang, J. Zhu, and V. Varma. "A Primer for Electronics Educators for Moving from Analog to Digital Communication: a Teaching Strategy", **14th International Conference on Industry, Engineering, and Management Systems**, Cocoa Beach, Florida, USA, 2008.
- Z. Zhang, "Online Education Techniques: Programming Environments and Software", International Conference on Interactive Computer aided Blended Learning, Brazil, 2007.
- Z. Zhang, "TCP Throughput of LAN and WLAN", 11th International Conference on Industry, Engineering, and Management Systems, Cocoa Beach, Florida, USA, 2005.
- Z. Zhang, "Neural Network Associator for Images and Their Chinese Characters", Proceeding of International Symposium on Neural Networks 2004, pp1021-1024, Springer LNCS Vol. 3173, Dalian, China, 2004.
- Z. Zhang, R. H. Moss, and W. V. Stoecker, "Rectified Color of Digitized Skin Tumor Images", Proceeding of Shanghai International Symposium on Nonlinear Science and Application, pp156-157, Shanghai, China, 2003.
- Z. Zhang, R. H. Moss, and W. V. Stoecker, "Neural Network Skin Tumor Diagnostic System", Proceeding of International Conference on Neural Networks and Signal Processing, pp578-580, Nanjing, China, 2003.
- Z. Zhang, R. H. Moss, and W. V. Stoecker, "A Novel Morphological Operator to Calculate Euler Number", Proceeding of International Workshop on Medical Imaging and Augmented Reality, MIAR2001, IEEE Computer Society, pp226-226, Hongkong, China, 2001.
- Z. Zhang and W. M. Huang, "A CT Image Management System Based on PC", Proceeding of 93 Far East Conference on Biomedical Engineering, Beijing, China, 1993.