Tao Liu

PERSONAL INFORMATION

Date of Birth: 01/21/1990 Gender: Female

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RESEARCH INTERESTS

♦ Artificial Intelligence

♦ Intelligent Tutoring System and Educational Games

EDUCATION BACKGROUND

♦ Aug.2012-present: North Carolina State University

Ph.D Candidate in Computer Science

♦ Sep.2008-June.2012:University of Science and Technology of China (USTC)

B.S. in Department of Electronic Engineering and Information Science Overall GPA: 3.67/4.3 Overall Weighted Grade: 87.51/100

RESEARCH EXPERIENCE

♦ Nov.2011-May.2012 Member of Smart Campus Program

Sponsors: Microsoft Research Asia and USTC, Advisor: Prof. Xuejin Chen

➤ I worked in a team project to build 3D Model of our campus and realize applications such as navigation, 3D wandering, and building indexing.

♦ Jul.2011-Sep.2011 Undergraduate Research Project, USTC

Mentor: Prof. Zhongfu Ye

- ➤ I participated in the Undergraduate Research Program and undertook my research work independently on the topic of "Image denoising and enhancement based on curvelet transform".
- I studied the wavelet and beyond wavelet transform, especially curvelet transform, and used the combination of curvelet transform and some traditional methods such as anisotropic diffusion and statistical model to image denoising. Due to the multiscale and anisotropy property of curvelet, the new method has advantages over wavelet transform both visually and qualitatively in PSNR.

♦ Jul.2011-Sep.2011 Dragon Star Program, National Natural Science Foundation of China

Advisor: Prof. Hui Xiong, Rutgers, the State University of New Jersey

- ➤ I took the Data Mining course and research on classification, clustering, association analysis and anomaly detection with machine learning methods. I got A+ in the course test.
- I worked on a team project on dataset provided by France Orange Corporation in KDD Cup 2009 to train and evaluate three classifiers to predict customers' future behavior. We got A+ on the project.

→ Jul.2010-Oct.2010 RoboGame2010, USTC

- ➤ I was the leader of 5-student team (F++) for three months, and collaborated with my teammates to build a remote-controlled humanoid robot and an automatic flat car robot with limited fund.
- I managed all the circuit designing and PCB welding of our robots, by self-study.

HONORS & AWARDS

- ♦ 2008-2012 Scholarship for Outstanding Students, USTC
- ♦ 2010 Outstanding Volunteer of the Volunteer Association of USTC
- ♦ 2009 Silvern Award of Women's 1500m running of the Sports Meeting, USTC
- ♦ 2010 Sports Morality Award of Radio Direction Finding, 4th All-China Games

STANDARD TESTS

♦ **GRE** Total: 1500 Verbal: 710/98%, Quantitative: 790/91%, Analytical Writing: 3.5/29%

♦ **TOEFL** Total: 98 Reading: 30, Listening: 24, Speaking: 20, Writing: 24

EXTRACURRICULAR ACTIVITIES

- **♦ 2012 Took part in the 2012 Yangzhou International Half Marathon**
 - Half Marathon:21km; Result: 2:28
- **♦ 2011 Took part in the 2011 Beijing International Marathon**
 - Full Marathon:42.195km; Result: 5:34:36; Ranking:701 (Female)
- **♦ 2011 Joined in the MSRA-USTC Summer Camp with students from different countries**
 - Attended the 6th International Conference on Image and Graphics which was hold by USTC
 - Worked on a team project on Kinect and Car Number Recognition with foreigner students
- **♦ 2008-2009 Volunteer of the Special Education Center in Hefei**
 - Worked in the library of the center to help the disabled children to borrow books and read books
- ♦ 2008 Member of the Volunteer Association of USTC and the Emergency Service Group
- ♦ 2009 Summer Holiday Joined in the Social Practice Group of School of Information, USTC
 - Did survey in Huoshan county, Anhui Province and brought some school supplies to the local students
- ♦ 2010 Winter Holiday Joined in the SIFE project
 - Helped the AIDS children in Fuyang, Anhui Province, together with the famous NGO "love Fu Association"
- \diamond 2010 Home tutor of two high school students, mainly in Math, Physics and Chemistry
- ♦ 2011 IEEE student member and Member of IEEE Student Branch in USTC
- ♦ 2010-2011 Vice president of the Cycling Association of USTC

TECHNICAL SKILLS

- ♦ **Programming** C/C++, C#, Matlab, Java, HTML
- Others Origin, Photoshop, Clementine, Dreamweaver, 3DMax, Unity 3D