Jingwei Zhang

Resumé

Education

Current Bachelor of Electronic Engineering, Tsinghua University.

2009 High school, No.2 High School of East China Normal University.

Experience

Research experience

year-year Research intern, Department of Computer Science, Supervised by Prof. Jie TANG.

Data mining, social network analysis

- Achievement 1;
- O Achievement 2

2011– **Student Research Training Project**, Department of Computer Science, Supervised by Prof. Current Baolin Liu.

Visual-auditory Crossmodal Effect of Elevation Recognition

- Designed an experiment with event-related potential and behavior tests using head-related transfer function:
- Will complete the experiment with more than 10 subjects.

Sept. Research intern, Center for Quantum Information of THU, supervised by Prof. Luming DUAN.

2011–Dec. Quantum Computation with Trapped Ions

- 2011 Studied quantum information/computation theories and existing methods, did field research;
 - \circ Rank 3/30 in a related examination.

Feb. 2010 Course Research.

Test and Evaluation of Background Extraction Algorithms

- Realized dominant background extraction algorithms with the C++ programming language;
- Tested speed and robustness, analyze applicabilities of each algorithms in varied conditions.
- Sept. Course Research, Group Leader, Supervised by Prof. Xiqin Wang.

2009-Oct. An Intersection Evaluation Method Base on Pedestrians

- 2009 Designed an intersection evaluation method, innovatively introduced dynamic model simulation;
 - Tested at five intersections in Beijing, proved high confidence of the method by comparing with survey results.

Project experience

Dec 2011 , Terrain Classification Based on Locally Stationary Wavelet Model.

- Realized locally stationary wavelet model in matlab.
- Designed terrain classification algorithm, tested in Brodatz textures and Google Earth database with robust results.
- Dec 2011 , Music transcription method based on poisson point process model and beat detection.
 - Improved point process MCMC method for music transcription with beat detection based on constant Q transform.
 - Reduced the computational complexity while accuracy rate almost unchanged.

May 2010 , Vocabulary-building software.

- Application using MFC and XML, integrated Barron's word list, GRE/TOEFL word list and Merriam-Webster Dictionary.
- Enhance vocabulary-building speed with laws of memory.

Honors and awards

Contest Awards

2010 Frist Prize, Beijing Physics Contest for college students.

2010 Into the final, Tsinghua Electronic Design Contest, team leader.

2010 Rank 2nd, Baidu Cup Tsinghua Duishi AI Contest, team leader.

2010 Rank 3rd, Tsinghua QuanHuang AI Contest.

2009 **Frist Prize**, National Physics Contest for high school students. Rank $4^{\rm th}$ all over China

Scholarships

 $2010 \ \ \textbf{Samsung Scholarship}, \ \textit{Tsinghua University}.$

CNY 3,000

2009 School of Informaion Science and Technology Scholarship, Tsinghua University.

CNY 20,000

Extracurricular activities

Volunteer KDD2012, Beijing

Volunteer 28th Challenge Cup

Member Tsinghua Ski Association

Member Tsinghua Science and Technology Association

Computer skills

Tools C/C++, Java, Matlab, verilog, Assembly

Environment Windows, Linux

Skills Hadoop

Other interests

- Evolutionary Psychology
- Behavioral Economics
- Photography
- Alpine skiing