

## EDUCATION

- Expected in Jul. 2010* **B.S., Software Engineering (Digital Media)**, School of Software, Beijing Institute of Technology
- GPA: 89/100, equivalent to 3.80/4.00
  - Rank: 2/79

## RESEARCH EXPERIENCE

- Oct. 2009 – Present* **Independent Researcher**  
**National Laboratory of Pattern Recognition**, Institute of Automation, Chinese Academy of Sciences  
**Project: Face Reconstruction and Pose Estimation**
- Reconstructed 3D faces for face recognition and pose estimation from a single image by deforming and subdividing a generic face model
  - Performed robust and automatic facial features localization using ASM (Active Shape Model)
  - Utilized Narrow Band Level Set to extract face contour as a geometric feature for face recognition
  - Estimated face pose via a novel linear regression method with low computation costs
- Mar. 2009 – Sept. 2009* **Research Team Leader**  
**Lab of Engineering Simulation Design and Computation**, Beijing Institute of Technology  
**Project: A Tangible Interface for Large-scale Artistic Performances Design**
- Developed a tangible user interface with augmented reality for intuitive virtual crowd authoring
  - Proposed a crowd behavior model as higher-level UI model, including three levels of crowd behavior: the stimulus, the psychological processes, and the reactions
  - Utilized geometry instancing to speed up virtual crowd rendering and animation
- Nov. 2008 – Sept. 2009* **Research Team Member**  
**Lab of Engineering Simulation Design and Computation**, Beijing Institute of Technology  
**Project: Virtual Rehearsal and Simulation System for China's 60<sup>th</sup> National Day Parade**
- Developed a virtual rehearsal system based on crowd simulation and virtual reality for simulating large-scale crowd parade of China's 60<sup>th</sup> National Day
  - Independently implemented an augmented reality system for facilitating crowd scene design

## PUBLICATIONS

- Feng Zheng, Hongsong Li, Gangyi Ding, *et al.* A Crowd Control and Simulation System based on Augmented Reality. *Journal of System Simulation, Proceedings of Chinese Conference on Virtual Reality and Visualization (CCVRV 2009), Beijing, China, Oct. 2009, Vol. 21 Suppl. 1, pp. 217-221.*

## CONFERENCE TALKS

- Feng Zheng, "A Crowd Control and Simulation System based on Augmented Reality", *Chinese Conference on Virtual Reality and Visualization (CCVRV 2009), Beijing, China, Nov. 2009.*

## HONORS AND AWARDS

- Nov. 2009*
- First prize of 11<sup>th</sup> **National Challenge Cup** (the "Olympics" of science and technology for Chinese college students), top 9% among over 1,150 teams, China
- Oct. 2009*
- **CASIC Scholarship** (China Aerospace Science & Industry Corp.), top 1% among over 2,000 undergraduate students, Beijing Institute of Technology
- Jun. 2009*
- Outstanding award of 5<sup>th</sup> **Capital Challenge Cup** (part of 11<sup>th</sup> National Challenge Cup), top 5% among over 540 teams, Beijing, China
- May. 2009*
- Second prize of **Microsoft Imagine Cup Software Design**, Finals of China, top 8 (0.3%) among over 3,000 teams, China
- Feb. 2009*
- Honorable mention of **MCM (Mathematical Contest in Modeling)**
- 2008/2009*
- First prize of **Microsoft Innovative Team Scholarship**, top 1%, Beijing Institute of Technology
- Sept. 2008*
- Second prize of **CUMCM (China Undergraduate Mathematical Contest in Modeling)**, top 8% among over 10,300 teams, China
- Oct. 2007*
- **National Scholarship** (highest honor for Chinese college students), top 1% among over 150 undergraduate students in School of Software, Beijing Institute of Technology
- 2007/2008/2009*
- Honor of **Excellent Student** of Beijing Institute of Technology, top 10% among over 150 undergraduate students in the School of Software, Beijing Institute of Technology
- 2007/2008/2009*
- **People's Scholarship**, top 15% among over 150 undergraduate students in the School of Software, Beijing Institute of Technology

## **SELECTED COURSE DESIGNS**

- Developed an information management system based on Google Map for crowd assembly and crowd evacuation
- Developed a Chinese programming language interpreter with compile theory based on a self-designed Chinese programming language
- Implemented a project of solar system navigation with OpenGL and MFC, including techniques such as particle effect, texture mapping, and geometry transformation
- Developed a .NET Online Book Shop based on three-layered architecture: presentation layer, business logic layer, data access layer
- Developed an Online DVD Rental Management System using JSP for presentation and JavaBean for business logic and database operation

## **COMPUTING SKILLS**

- Programming Languages: C, C++, Matlab, Java, C#, Assembly
- Web Technologies: PHP, JSP, ASP, HTML, JavaScript
- Operating Systems: Linux, Windows, Macintosh
- Databases: SQL Server, MySQL
- Math & Statistical Package: Matlab, Lingo, SPSS

## **EXTRACURRICULUM ACTIVITIES**

- 2006 – Present* • Commissary in Charge of Studies in my class, School of Software
- 2007 – 2008* • Minister of Science and Technology Association, School of Software
- 2006 – 2007* • Member of the University Student Union, Beijing Institute of Technology
- Apr. 2007* • Member of the Aerobics Team, School of Software
- Dec. 2006* • Member of the Chorus Team, School of Software

## **LANGUAGE ABILITY**

- IBT: Total 101 (Reading 28, Listening 27, Speaking 22, Writing 24)
- GRE: Verbal 570, Quantity 800, Analytical Writing 3.5