JIANFENG CHEN

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RESEARCH INTERESTS

Computer Aided Geometric Design: Freeform surface re-parameterization, Ricci Flow, G¹ continuous on NURBS surfaces

Computer Graphics and Data Visualization: Multi-resolution methods, Forensic data analysis

Data Mining and Data Analysis: Frequent pattern mining

EDUCATION

B.E. in **Software Engineering**

09/2010 – 06/2014(expected)

Shandong University, Jinan, China **Average (Total):** 89.27 (top 7%) **Average (Major):** 90.78

GPA: 3.74(Total), 3.8(Major)

CORE QUALIFICATIONS

- Experience in researching on optimal parameterization of freeform surfaces
- Experience in large-scale data analysis
- Experience developing object-oriented programs
- Experience developing android applications
- Experience developing B-S structure programs
- Experience with developing embedded systems programs

PUBLICATIONS

- Y.J. Yang, W. Zeng, **J.F. Chen**. Equiareal parameterizations of NURBS surfaces. *Graphical Models*, 76(1):43–55, 2014
- Y.J Yang, **J.F. Chen**. Optimizing equiareality of NURBS surfaces using composite Möbius transformations. Under review. *Geometric Modeling and Processing (GMP)*, Singapore, 2014
- **J.F.Chen**, W.L.Chen, W.Z.Yi, L.Z.Cui. An Interest-based Social Networking Content Recommendation Method. Accepted. (CSCD): *Journal of Mathematics in Practice and Theory*, Beijing, China, 2013.
- **J.F.Chen**, W.Z.Yi, Q.Liu. Intelligent Navigation System basing Data Mining and Real-time Traffic. *Science Creation Competition*, Shandong University, 2012.

RESEARCH EXPERIENCE

08/2012 - 04/2013 Equiareal parameterizations of NURBS surfaces

Shandong University (Advisor: Prof. Yijun YANG)

In addition to the paper work, studied optimization for the equiareality of given NURBS surfaces. Provided an explicit solution (for Bezier surface) and numerical solution (for NURBS) to render the coefficients of the Mobius transformations.

04/2013- now Research on general rational bilinear transformation of NURBS surfaces

Shandong University (Advisor: Prof. Yijun YANG)

In addition to the paper work, improve the conformity of NURBS surfaces by an optimization algorithm using general bilinear transformations. Verify the correctness and the practicability of the algorithm.

12/2012 - 02/2013 Recommendation System based on SNS

Cooperate with: Institute of Information Engineering, Chinese Academy of Sciences

Constructed a model to express the user's interest and calculate the keywords of a passage. Gave an algorithm to quantify the relationship between user's interest and the keyword of given material.

09/2012- 12/2012 InnoTraffic-Intelligent Navigation System

Shandong University (Advisor: Prof. Hongjun DAI)

In addition to the paper work, developed a model to express various kinds of roads, overpasses, etc. in the city. Developed a machine to collect real-time data and analysis them. Developed an android app to test the system.

03/2012 - 07/2012 Electronic Trading System with Hadoop Storage

Shandong University (Advisor: Prof. Lizhen CUI)

Studied the widely used distributed storage system-Hadoop. Revised the "map" algorithm in original Hadoop system so that it can be suitable for the electronic trading use.

02/2012 -04/2012 The Query and Update efficiency of B-Tree structure

Shandong University (Advisor: Dr. Ming SUN)

Wrote a B-Tree using C++. Analyzed the spatial complexity and time complexity of the B-Tree and its operation. Compared this data structure with other similar data structure- B^* Tree.

HONORS & AWARDS

- Second Prize in International Contest of Applications in Network of Things (China), 2013
- Second Prize in "Challenge Cup" Curricular Academic Sci. and Tech. contest, Shandong Province, 2013
- Merit Scholarship (Top 10%), Shandong University (2011, 2012, 2013)
- First Prize in Science Creation Competition, SC Shandong University, 2012

ACADEMIC ACTIVITY

- Attendance in China National Computer Congress 2012
- Attendance in China International Internet of Things(sensor network) Expo 2013

MEMBERSHIPS

- Bchine Student Innovation Lab, Shandong University
- Research Center of Human-Computer Interaction & Virtual Reality, Shandong University
- Shandong University-Virginia Tech International Laboratory
- Mathematical Modeling Club, Shandong University
- Underwater Robot Group, Shandong University

REFERENCE

- Prof. Yijun Yang, HCI&VR Lab, Shandong University,
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- Prof. Lei Lu, Software College, Shandong University,
 - +86-531-8839-1816, lulei@sdu.edu.cn
- More available upon request