

Shu Huang

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Objective Research or development position for data mining, information retrieval, information and database system.

Research Interest

- Data Mining and Machine Learning in Web Search and Semantic Web.
- Information Retrieval and Search Engine.
- Social Network Evolution Analysis and Applications.
- Digital Library, Database and Information Systems.

Education **The Pennsylvania State University**, University Park, PA 09/2006 - present
Ph.D. Candidate (degree expected 2011), Information Science and Technology

Fudan University, Shanghai, P.R. China
Major: B.S. in Computer Science 06/2006
Minor: International Business 06/2006

Academic & Professional Experiences **IBM Corporation, Silicon Valley Lab, California USA** Summer 2008
Summer co-op on DB2 for z/OS Semantic Transformation , IBM Software Group.

The Pennsylvania State University
Research Assistant of Group Linkage and Bibliographic Citation Project
Penn State Information, Knowledge and wEb Research Group 05/2008 - present

- Machine learning based Citation data cleaning
- Citation network analysis and application.

Research Assistant of Social Network Evolution Analysis Project
Penn State Information, Knowledge and wEb Research Group 08/2009 - present

- Social network evolution modeling with statistic inference.
- Structure features analysis and attributes selection.

Research Assistant of Chemistry Citeseer Digital Library Project
Intelligent Information Systems Research Laboratory 09/2006 - 05/2008

- Query expansion and information retrieval optimization.
- Mining log data and spatial information for personalized query expansion.

Fudan University, China
WebDB & P2P Computing Lab, Computer Science Department 08/2005 - 05/2006
Research assistant of Stream Data Mining and Aggregate Query System

- Multi-dimension stream data mining.
- Implement a multi-granularity aggregation query project.
- Use fractals and inverted histogram to process aggregate queries on time evolving data stream.

Teaching Assistant, <i>IST 240 JAVA Programming</i>	09/2008 - 12/2009
Instructor, Bootcamp, <i>IST 210 Organization of Data</i>	Spring 2008
Teaching Assistant, <i>IST 210 Organization of Data</i>	Fall 2007

Publications Shu Huang, Qiankun Zhao, C. Lee Giles, Prasenjit Mitra. Hierarchical Location and Topic based Query Expansion. *In Proceedings of the Twenty-Third AAAI Conference on Artificial Intelligence (AAAI 2008)*, Chicago, USA, July 2008.

Shu Huang, Dongwon Lee. Mixed Group Discovery with Group Linkage and Social Network Analysis. *submitted for review*

Professional Services Presentation:
 Hierarchical Location and Topic based Query Expansion, hosted by AAAI 2008
 External Reviewer: WWW 2009, JDCL 2009, SIGKDD 2008, DEXA

Relevant Courses and Projects Machine Learning and Data Mining 09/2008 - 12/2008

- Application of data mining techniques
- Logistic Regression, LDA, MDA, K-means&K-center, Decision Tree, HMM

Regression Methods and Experiment Design 09/2007 - 05/2008

- Use Minitab and regression methods to analyze statistic data
- Design statistic experiments and analysis

Theory of Statistics 09/2007 - 12/2007

- Statistic inference with different statistic models

Human Behavior and HCI in Information Retrieval 09/2006 - 05/2007

- Investigate human computer interaction in social context
- Information System design with human behavior analysis

Software Engineering and DFD Modeling Project 03/2005 - 06/2005

- Implement the loop of software development
- Simulation with data flow diagram and class diagram.

Database Management System Project 09/2005 - 12/2005

- Develop a database management system with C and PHP
- Allows on-line queries and real-time managements.

Data Structure, Algorithm, and Programming 09/2005 - 12/2005

Compiler Project 03/2005 - 05/2005

- Implement a compiler which compiles Weak Pascal language.

Architecture Project and Digital Component Design 04/2005 - 06/2005

- Design and simulate part function of a CPU with VHDL language.

Computer Graphics, Computer Networks and Communication. 09/2005 - 12/2005

Operating System Project 09/2004 - 12/2004

- Develop a simulative operating system in Unix system.

Monetary Banking, International Finance, International Trade 09/2004 - 12/2005

Microeconomics, Accounting, Macroeconomics

09/2003 - 06/2004

Skills

Familiar with JAVA, C, C++, MYSQL.
Experienced in PHP, MATLAB, JSP, Microsoft SQL Server, Minitab.
Strong Learning, Communication, and Organization Skill.

Honors and Awards

Travel Grant Award to the AAAI Conference on Artificial Intelligence	Jul 2008
Research Assistant Award, Information Sciences and Technology, Penn State	2006 - 2007
Teaching Assistant Award, Information Sciences and Technology, Penn State	2007 - 2009
National Fellowship, Fudan University (top 5%)	2003 - 2006
People Fellowship, Fudan University (top 10%)	2003 - 2006

Social Activities

Volunteer for Shanghai Discovery Children's Museum	2005
Volunteer for Conference 2003 of Job Guide for Fudan University Graduates	2003
Department President for Student Union of School of Information Science in Fudan University	2003