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RESEARCH INTERESTS

1. Social Computing
2. Knowledge Sharing in online Communities
3. Mechanism Design in Distributed Computing
4. Network Security

TEACHING INTERESTS

1. Social Network Analysis
2. Telecommunications and networking
3. Electronic Commerce
4. Database Management
5. Programming Languages

EDUCATION

Ph.D. Management Information Systems 2007

McCombs School of Business, the University of Texas at Austin
Minors in Economics and Finance, GPA 3.94

Dissertation: Economic Issues in Distributed Computing

Advisor: Professor Andrew B. Whinston

Committee: Andrew B. Whinston (chair); Ken Hendricks, John Mote, Gautam Ray, Gary Koehler

M.S. Computer Science 1999

Tsinghua University, China

Dissertation: Security System Design for CERNET Networks

B.S. Computer Science 1997

Tsinghua University, China

Dissertation: The Design of IP Network Address Translators

WORK EXPERIENCE

2007-present Postdoctoral Fellow, Science of Networks in Communities (SONIC)
Research Laboratory, Department of Industrial Engineering and
Management Sciences, McCormick School of Engineering, Northwestern
University

2000-2007 Research Associate, Center for Research in Electronic Commerce, the
University of Texas at Austin

1999-2000 System Engineer, Bell Labs, Lucent Technologies, China

1997 Summer Intern, Dascom Inc. (acquired by IBM in 1999 with Tivoli)

1996-1999 Research Assistant, National Network Center, China Education and
Research Network

TEACHING EXPERIENCE

- 2007 spring Instructor, Data Communications and Networking (MIS 365), the University of Texas at Austin
- 2006 fall Teaching Assistant, Information Technology in Business (MIS 301), the University of Texas at Austin
- 2006 fall Teaching Assistant, Decision Support Systems (MIS 381N.4), the University of Texas at Austin
- 2004 spring Instructor, Data Communications and Networking (MIS 365), the University of Texas at Austin
- 2003 spring Teaching Intern, Courses: C++ Programming & Labs (COS 2325 & 2125), St. Edwards University
- 2001-2003 Guest Lecturers, Data Communications and Networking, and Introduction of E-Commerce, the University of Texas at Austin
- 1997-1999 Teaching Assistant, TCP/IP Protocols, Tsinghua University, China

REFEREED JOURNALS

1. M. Xia, Y. Huang, W. Duan, and A.B. Whinston. "Voice of the Crowd: Ballot-box Communication in Online Sharing Communities," forthcoming *Communications of the ACM*.
2. Y. Huang, X. Geng and A. B. Whinston, "Defeating DDoS Attacks by Fixing the Incentive Chain," *ACM Transactions on Internet Technology*, 7:1, Feb 2007.
3. Y. Huang, X. Geng and A. B. Whinston, "Network Mapping Services for Dynamic Selection of Web Services: Promises and Challenges," *Information Systems and e-Business Management*, 3:3 Oct. 2005.
4. X. Geng, Y. Huang, and A. B. Whinston, "Smart marketplaces: A step beyond Web services," *Information Systems and e-Business Management*, 1:1 Jan. 2003.
5. X. Geng, Y. Huang, and A. B. Whinston, "Defending Wireless Infrastructure against the Challenge of DDoS Attacks," *ACM/Baltzer Mobile Networks and Applications Journal*, 7:3, June 2002.

REFEREED CONFERENCES

1. B. Gu, Y. Huang, W. Duan, and A. B. Whinston, "The Dynamics of Online Peer-to-Peer Communities: An Empirical Investigation of Music Sharing Network as An Evolutionary Game," in *Proceeding of the 6th Workshop on e-Business (WeB'07)*, Dec. 2007.
2. B. Gu, Y. Huang, W. Duan, and A. B. Whinston, "The Dynamics of Online Peer-to-Peer Communities: An Empirical Investigation of Music Sharing Network as an Evolutionary Game," in *Proceeding of the 2007 Conference on Information Systems and Technology (CIST'07)*, Nov. 2007.
3. B. Gu, Y. Huang, W. Duan, and A. B. Whinston, "An Empirical Investigation of the Dynamics of Online Communities as an Evolutionary Game," in *Proceeding of Third*

Statistical Challenges in eCommerce Research Symposium (SCECR 2007), May 2007.

4. M. Xia, Y. Huang, W. Duan, and A. B. Whinston, “Implicit many-to-one communication in online communities,” in *Proceeding of the 3rd International Conference on Communities and Technologies (C&T2006)*, June 2007.
5. Q. Ye, Y. Huang, A.B. Whinston, “Reputation-Based anti-Spamming,” in *Proceeding of Workshop on Information Security and Assurance (WISA2006)*, Dec. 2006.
6. Y. Huang, W. Duan, B. Gu, and A.B. Whinston, “The Dynamics of Online Communities: An Empirical Investigation of Music Sharing Network as An Evolutionary Game,” in *Proceeding of the 5th Workshop on e-Business (WeB’06)*, Dec. 2006.
7. M. Xia, W. Duan, Y. Huang, and A. B. Whinston, “Do Free-riders Matter? An Empirical Analysis of Online Sharing Communities,” in *Proceeding of the 2006 Conference on Information Systems and Technology (CIST’06)*, Nov. 2006.
8. Y. Huang, A. B. Whinston, and X. Geng, “Revealing Information in Distributed Computing,” in *Proceedings of the 4th Workshop on e-Business (WeB’05)*, Dec. 2005.
9. Y. Huang, A. B. Whinston, and X. Geng, “Network Mapping For Peer-to-peer File Sharing,” in *Proceedings of the 13th Workshop on Information Technologies and Systems (WITS’03)*, Dec. 2003.
10. Y. Huang, A. B. Whinston, and X. Geng, “Network Mapping Services for Provisioning of Decentralized Web Services: Promises and Issues,” in *Proceedings of the 2nd Workshop on e-Business (WeB’03)*, Dec. 2003.

PAPERS UNDER REVIEW

1. “To Share or Not To Share? -- An Empirical Analysis on User Decisions in Online Sharing Communities,” with M. Xia, W. Duan, and A. B. Whinston (under review, *Information Systems Research*)
2. “CI-KNOW: Recommendation based on Social Networks,” with N. Contractor and Y. Yao (under review, *The 9th Annual International Conference on Digital Government Research*)

WORKING PAPERS AND PROJECTS

1. “A Novel Solution to Distributed Denial of Service Attacks,” with Q. Ye and A. B. Whinston
2. “Online Knowledge Sharing in Open Collaborative Groups” with M. Lin and A. B. Whinston
3. “Drivers of Online Sharing Communities: An Empirical Investigation” with M. Xia, W. Duan, and A.B. Whinston
4. “Content Diffusion in Peer-to-Peer Networks” with M. Xia and W. You

5. Friendship Formation in SecondLife
6. Cyberinfrastructure Knowledge Networks on the Web (CI-KNOW)
7. Inquiring Knowledge Networks On the Web: I-KNOW

CONFERENCE PRESENTATIONS

1. "CI-KNOW: Recommendation based on Social Networks," poster presentation in *The 9th Annual International Conference on Digital Government Research (dg.o 2008)*, Montreal, Canada, May 2008.
2. "Cyberinfrastructure Knowledge Networks on the Web (CIKNOW)," software demo presentation in *Sunbelt XXVIII International Sunbelt Social Network Conference (Sunbelt'08)*, ST. Pete Beach, FL, Jan. 2008.
3. "The Dynamics of Online Peer-to-Peer Communities: An Empirical Investigation of Music Sharing Network as an Evolutionary Game," in *Proceeding of the 2007 Conference on Information Systems and Technology (CIST'07)*, Seattle, WA, Nov. 2007.
4. "The Dynamics of Online Communities: An Empirical Investigation of Music Sharing Network as An Evolutionary Game," in *the 5th Workshop on e-Business (WeB'06)*, Milwaukee, WI, Dec. 2006.
5. "Revealing Information in Distributed Computing," in *the 4th Workshop on e-Business (WeB'05)*, Las Vegas, NV, Dec. 2005.
6. "oPlexus – A Distributed Platform for IS research and Education", Poster presentation in *the 16th Workshop on Information Technologies and Systems (WITS'05)*, Las Vegas, NV, Dec. 2005.
7. "Network Mapping For Peer-to-peer File Sharing," in *the 13th Workshop on Information Technologies and Systems (WITS'03)*, Seattle, WA, Dec. 2003.
8. "Network Mapping Services for Provisioning of Decentralized Web Services: Promises and Issues," in *the 2nd Workshop on e-Business (WeB'03)*, Seattle, WA, Dec. 2003.

SKILLS

1. Programming languages: C++, Visual Basic, and Java
2. Databases: Microsoft SQL Server, Access, Oracle, and MySQL
3. Web Application Design: Perl, PHP, and Ruby on Rails
4. Operating Systems: Windows family, Linux, Solaris, AIX, and HP-UX
5. Statistics: Matlab, SPSS, and TSP
6. Social network analysis: UCInet, Pajek

SPECIAL AWARDS AND HONORS

1. NET Institute Summer Grant, Networks, Electronic Commerce and Telecommunications ("NET") Institute, 2007 (with Bin Gu, Wenjing Duan, and Andrew B. Whinston)

2. NSF TeraGrid Project TG-NCR060001N, UIUC NCSA 2006 (with Mu Xia and Wenjing Duan)
3. Bonham Funds, 2003-2004 and 2004-2005
4. Preemptive Fellowship, University of Texas at Austin, 2000-2001
5. Prominent Graduate Award, 1997
6. IBM Scholarship, Tsinghua University, 1994
7. Excellent Student Scholarship, Tsinghua University, 1993, 1995 & 1996

PROFESSIONAL ACTIVITIES

Reviewer: Decision Support Systems, Journal of Organizational Computing and Electronic Commerce, Journal of Electronic Research, Workshop on e-Business, Workshop on Information Security and Assurance