

# Guoying (Grace) Zhang

## Curriculum Vitae

Professor of Management Information Systems (MIS)  
Dillard College of Business Administration, Midwestern State University, TX  
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### Education Background

Ph.D., Information Systems, University of Washington, Seattle, Washington, 2007  
M.S., Economics, Shanghai Jiao Tong University, Shanghai, China, 2000  
B.S., Computer Science, Shanghai Jiao Tong University, Shanghai, China, 1997

### Professional Experience

Department Chair of Accounting, MIS, and Legal Studies, August 2024 – Present  
Professor of MIS, Midwestern State University, August 2019 – Present  
Associate Professor of MIS, Midwestern State University, 2013 – 2019  
Assistant Professor of MIS, Midwestern State University, 2007 – 2013  
Instructor of MIS, University of Washington, 2006 – 2007  
Graduate Assistant, University of Washington, 2002 – 2007  
Business Analyst, Motorola China, 2000 – 2002  
Graduate Assistant and Instructor, Shanghai Jiao Tong University, 1997 – 2000

### Teaching Experience

#### Midwestern State University

Undergraduate Level: Introduction to Management Information Systems, Business Programming Language, Database Design and Management, Advanced Programming, Decision Making and Decision Support Systems, Advanced Database Design, Web Application Development, Data Visualization, Advanced Programming, Undergraduate Special Topics in MIS, Undergraduate Internship in MIS. Graduate Level: Introduction to Business Analytics, Information Technology Management, Database Applications in Business, Data Mining and Business Intelligence, Foundations for the MBA, Graduate Special Topics in MIS, Graduate Internship in MIS

#### University of Washington

Undergraduate Level: Introduction to Information Systems, Fundamentals of Business Information Technologies, Fundamentals of Application Programming, Database Management, Project on Technology Management, Individual Project on Systems Design and Analysis, Data Communication and Networking

#### Shanghai Jiao Tong University:

Undergraduate Level: Theory and Practice of International Trade

## Research and Scholarly Activity

### Peer-Reviewed Journal Publications

1. Peng, J., **Zhang, G.**, & Chiu, C. (2022). An Empirical Investigation on Vulnerability for Software Companies. *International Journal of Systems and Software Security and Protection (IJSSSP)*, 13 (1).
2. Peng, J., Guo, P., Guo, M., & **Zhang, G.** (2020). I.T. Application Maturity in China - How Do You Manage It. *Journal of Global Information Management*, 28 (3), DOI: 10.4018/JGIM.2020070106.
3. **Zhang, G.**, Johnston, C., & Shao, C.Y. (2019). Working Students and Their Academic Performance - A Decision Tree Analysis. *Journal of Higher Education Theory and Practice*, 19 (7), 123–136.
4. Peng, J., Quan, J., **Zhang, G.**, & Dubinsky, A. J. (2016). Mediation effect of business process and supply chain management capabilities on the impact of I.T. on firm performance: Evidence from Chinese firms. *International Journal of Information Management*, 36 (1), 89–96, DOI: <http://dx.doi.org/10.1016/j.ijinfomgt.2015.09.006>.
5. Dey, D., Lahiri, A., & **Zhang, G.** (2015). Optimal Policies for Security Patch Management. *INFORMS Journal on Computing*, 27 (3), 462–477, DOI: <http://dx.doi.org/10.1287/ijoc.2014.0638>.
6. Peng, J., Quan, J., **Zhang, G.**, & Dubinsky, A. (2015). Knowledge Sharing, Social Relationships, and Contextual Performance: The Moderating Influence of Information Technology Competence. *Journal of Organizational and End User Computing*, 27 (2), 58–73, DOI: 10.4018/joeuc.2015040103.
7. Peng, J., **Zhang, G.**, Zhang, S., Dai, X., & Li, J. (2014). Effects of Online Advertising on Automobile Sales. *Management Decision*, 52 (5), 834–851.
8. Peng, J., **Zhang, G.**, Fu, Z., & Tan, Y. (2014). An Empirical Investigation on Organizational Innovation and Individual Creativity. *Information Systems and e-Business Management*, 12 (3), 465–489.
9. **Zhang, G.**, Johnston, C., & Shao, C.Y. (2014). A Model for Optimally Promoting Application Diffusion on Facebook. *International Journal of Marketing Studies*, 6 (4).
10. Dey, D., Lahiri, A., & **Zhang, G.** (2014). Quality Competition and Market Segmentation in the Security Software Market. *MIS Quarterly*, 38 (2), 589-606.
11. Dey, D., Lahiri, A., & **Zhang, G.** (2012). Hacker Behavior, Network Effects, and the Security Software Market. *Journal of Management Information Systems*, 29 (2), 77-108.
12. Peng, J. & **Zhang, G.** (2012). Path Analysis of I.T. Application Maturity. *International Journal of Networking and Virtual Organisations*, 10 (3/4), 292–306.
13. Winzent, D., Wilson, P., Shao, C.Y., & **Zhang, G.** (2012). Effectiveness of Celebrity Voice-overs in Advertising Recall. *Journal of Management and Business Research*, 2 (1), 6-20.

14. Peng, J., **Zhang, G.**, Fu, Z., & Tan, Y. (2012). Exploring Innovation in the Context of Employee Relationship and IT-Enabled Knowledge Sharing. *Lecture Notes in Business Information Processing*, 108 (1), 22–36.
15. **Zhang, G.**, Dubinsky, A. J., & Tan, Y. (2011). Impact of Blogs on Sales Revenue: Test of a Network Model. *International Journal of Virtual Communities and Social Networking*, 3 (2), 68–82.
16. Peng, J., **Zhang, G.**, Chen, R., & Tan, Y. (2011). Impacts of Essential Elements of Management on I.T. Application Maturity - A Perspective from Firms in China. *Decision Support Systems*, 51 (1), 88–98.
17. Wierschem, D., **Zhang, G.**, & Johnston, C. (2010). Information Technology Certification Value: an initial response from employers. *Journal of International Technology and Information Management*, 19 (4), 91-108.
18. **Zhang, G.** & Johnston, C. R. (2010). Employment and the Academic Performance of Undergraduate Business Students. *Southwestern Business Administration Journal*, 10 (2), 54–83.
19. Dubinsky, A. J., **Zhang, G.**, & Wood, M. (2010). Revelations from Data Mining: A Case Study of a Sales Territory. *Journal of Selling and Major Account Management*, 10 (2), 8–26.
20. Kaya, C. C., **Zhang, G.**, Tan, Y., & Mookerjee, V. S. (2009). An Admission-Control Technique for Delay Reduction in Proxy Caching. *Decision Support Systems*, 46 (2), 594–603.

### Refereed Proceedings

1. Zhang, G. (2024). Small World Effect of Global Open-Source Software Collaboration on GitHub: A Social Network Analysis. *Southwest Region of the Decision Sciences Institute, Annual Meeting*.
2. Zhang, G. (2023). Exploring Impacts of Data Governance and Capability on The Availability of Open Data. *Southwest Region of the Decision Sciences Institute, Annual Meeting*.
3. Zhang, G. (2020). Using Google Colab for Data Visualization. *Southwest Region of the Decision Sciences Institute, Annual Meeting*.
4. Zhang, G. (2019). The Effect of Student's Behavior of Using Codecademy. *Southwest Region of the Decision Sciences Institute, Annual Meeting*.
5. Zhang, G. (2018). Detecting Mobile Advertising click fraud using TensorFlow. *International Academy of Business and Public Administration Disciplines Annual Conference*.
6. Zhang, G. (2018). Detecting Mobile Advertising Click fraud using TensorFlow. *Southwest Region of the Decision Sciences Institute, Annual Meeting*.

7. Zhang, G., Johnston, C., & Shao, C. (2014). The Perceived Importance of Workplace Competencies by MIS Students, Recent MIS Graduates, and Business Employers. *Southwest Region of the Decision Sciences Institute, Annual Meeting*.
8. Dey, D., Lahiri, A., & Zhang, G. (2013). Quality Competition in the Security Software Market. *Hawaii International Conference on System Sciences (HICSS)*, 3992-4001.
9. Wierschem, D. C., Zhang, G., & Johnston, C. R. (2012). Information Technology Credential Value - From the Perspective of Industry Employers. *Proceedings of Decision Sciences Institute, Southwest Region Annual Meeting (SWDSI)*.
10. Dey, D., Lahiri, A., & Zhang, G. (2012). Network Externality in Security Software Market. *Proceedings of Hawaii International Conference on System Sciences (HICSS) 2012*.
11. Peng, J., Chen, R., Zhang, G., & Tan, Y. (2011). Exploring Innovation in the Context of Employee Relationship and IT-enabled Knowledge Sharing. *Proceedings of 10<sup>th</sup> Workshop on E-Business (WEB)*.
12. Zhang, G., Johnston, C., & Shao, C. (2011). Advertising using Facebook Application. *Proceedings of Decision Sciences Institute, Southwest Region Annual Meeting (SWDSI)*.
13. Wilson, P., Winzent, D., Shao, C., & Zhang, G. (2011). Effectiveness of Celebrity Voice-Over in Advertising. *FBD-Association of Collegiate Marketing Educators (ACME) Annual Conference*.
14. Zhang, G. & Johnston, C. (2010). Student Employment and Academic Performance at the University Level. *Proceedings of Decision Sciences Institute, Southwest Region Annual Meeting (SWDSI)*.
15. Zhang, G. & Johnston, C. (2009). The Role of Employment in Academic Performance. *Proceedings of Decision Sciences Institute, Southwest Region Annual Meeting (SWDSI)*.
16. Shao, C., Martinez, J., Wilson, P., & Zhang, G. (2009). The Moderating Influence of Culture Value on the Relationship Between Dress and Customer Affect. *FBD-Association of Collegiate Marketing Educators (ACME) Annual Conference*.
17. Dey, D. & Zhang, G. (2009). Vertical Differentiation in the Market for Security Software. *Proceedings of Pacific Asia Conference on Information Systems 2009*.
18. Zhang, G. & Tan, Y. (2009). Word-of-Mouth Communication in a Network of Blogs. *Proceedings of the 3rd China Summer Workshop on Information Management*.
19. Zhang, G. & Shao, C. Y. (2009). Optimal Diffusion Strategy of Advertising using a Facebook Application. *Proceedings of 15th Americas Conference on Information Systems*.
20. Zhang, G., Kannan, K., & Tan, Y. (2006). Optimal Patching Effort against Internet Worms. *Proceedings of Workshop on Information Technology and Systems 2006*.

### **Book Chapters**

1. Peng, J., Quan, J., **Zhang, G.**, & Dubinsky, A. J. (2018). Knowledge Sharing from Employee's Perspective - Social Relationship, Contextual Performance, and I.T. Competence. *Handbook of Research on the Evolution of I.T. and the Rise of E-Society*. IGI Global.

- Peng, J., Quan, J., **Zhang, G.**, & Dubinsky, A. J. (2016). Knowledge Sharing, Social Relationships, and Contextual Performance: The Moderating Influence of Information Technology Competence. *Business Intelligence: Concepts, Methodologies, Tools, and Applications*. IGI Global.

### Conference Presentations

- Zhang, G. (2024). Small World Effect of Global Open-Source Software Collaboration on GitHub: A Social Network Analysis. Southwest Region of the Decision Sciences Institute, Annual Meeting, Galveston, Texas.
- Zhang, G. (2023). *Exploring Impacts of Data Governance and Capability on The Availability of Open Data*. Southwest Region of the Decision Sciences Institute, Annual Meeting, Houston, Texas.
- Zhang, G. (2022). *Learning Effectiveness of Oline Interactive Platform*. Midwest Decision Sciences Institute, Annual Meeting, Rochester Hills, Michigan.
- Zhang, G. (2020). *Using Google Colab for Data Visualization*. Southwest Region of the Decision Sciences Institute, Annual Meeting, San Antonio, Texas.
- Zhang, G. (2019). *The Effect of Student's Behavior of Using Codecademy*. Southwest Region of the Decision Sciences Institute, Annual Meeting, Houston, Texas.
- Zhang, G. (2018). *Detecting Mobile Advertising click fraud using TensorFlow*. International Academy of Business and Public Administration Disciplines Annual Conference, Dallas, Texas.
- Zhang, G. (2018). *Detecting Mobile Advertising click fraud using TensorFlow*. Southwest Region of the Decision Sciences Institute, Annual Meeting, Albuquerque, New Mexico.
- Zhang, G., Johnston, C., & Shao, C. (2014). *The Perceived Importance of Workplace Competencies by MIS Students, Recent MIS Graduates, and Business Employers*. Southwest Region of the Decision Sciences Institute, Annual Meeting, Dallas, Texas.
- Zhang, G., Tian, Y., & Tan, Y. (2013). *Competition and Integration of Digital Content Distribution Channels*. MSU Scholarship Colloquium, Wichita Falls, Texas.
- Wierschem, D., Zhang, G., & Johnston, C. (2012). *Information Technology Credential Value – from the Perspective of Industry Employers*. Decision Sciences Institute, Southwest Region Annual Meeting, New Orleans, Louisiana.
- Zhang, G., Shao, C., & Johnston, C. (2011). *Advertising using Facebook Application*. Decision Sciences Institute, Southwest Region Annual Meeting, Houston, Texas.
- Zhang, G., Shao, C., & Johnston, C. (2011). *Do 'Good Students' that work just find a way to be good?* MSU Scholarship Colloquium, Wichita Falls, Texas.
- Zhang, G. & Johnston, C. (2010). *Student Employment and Academic Performance at the University Level*. Decision Sciences Institute, Southwest Region Annual Meeting, Dallas, Texas.
- Zhang, G. & Tan, Y. (2009). *Learning from Past Failures: An Empirical Study of Security Vulnerabilities*. INFORMS, San Diego, California.

15. Zhang, G. & Shao, C. Y. (2009). *Optimal Diffusion Strategy of Advertising using a Facebook Application*. 15<sup>th</sup> Americas Conference on Information Systems, San Francisco, California.
16. Zhang, G. & Tan, Y. (2009). *Word of Mouth Communication in a Network of Blogs*. The 3rd China Summer Workshop on Information Management, Guangzhou, China.
17. Zhang, G. & Johnston, C. (2009, February). *The Role of Employment in Academic Performance*. Decision Sciences Institute, Southwest Region Annual Meeting, Oklahoma City, Oklahoma.
18. Zhang, G. (2006, December). *Information Security: Patch Management, Security Market, and Vendor Learning*. Doctoral Consortium, International Conference on Information Systems, Milwaukee, Wisconsin.
19. Zhang, G. (2005, June). *Optimal Security Patching Policies*. Doctoral Consortium, Centers for International Business Education and Research, Seattle, Washington.

## **Research Grants**

1. 2017: Zhang, G., "Detecting Mobile Advertising Click Fraud using TensorFlow," Faculty Research Grant, Midwestern State University.
2. 2011: Zhang, G., "Competition and Integration of Digital Content Distribution Channels," Faculty Research Grant, Midwestern State University.
3. 2009: Zhang, G. and Johnston, C., "An Investigation of the Relationship between Working and Academic Achievement within the Student Population," Faculty Research Grant, Midwestern State University.

## **Ph.D. Dissertation**

Three essays on Managing Information Systems Security: Patch Management, Learning Dynamics, and Security Software Market. The University of Washington, Seattle, 2007

## **Professional Involvement**

### **Editorial Review Board Member**

*Journal of Information Systems Education* (**Senior Editorial** Review Board)

*International Journal of Virtual Communities and Social Networking*

*International Journal of Social Media and Online Communities* (**Associate Editor**)

### **Reviewer for Peer-Reviewed Journals (2007 – Present)**

*MIS Quarterly*

*Information Systems Research*

*Journal of Management Information Systems*

*Electronic Commerce Research and Applications*

*Journal of Information Systems Education*

*Management Science*  
*Information Technology and Management*  
*Information Systems Journal*  
*Decision Sciences*  
*Journal of Electronic Commerce Research*  
*Technology in Society*  
*Journal of Global Information Technology Management*  
*International Journal of Production Research*  
*International Journal of Information Management*  
*International Journal of Virtual Communities and Social Networking*  
*Emerging Markets Finance and Trade*  
*International Journal of Social Media and Online Communities*  
*International Journal of Interactive Communication Systems and Technologies*  
*International Journal of Environmental Research and Public Health*  
*Midwestern Business and Economic Review*

**Program Committee Member, Reviewer or Discussant for Annual Conferences**  
**(2007 – Present)**

Workshop on Information Technologies and Systems (WITS)  
China Summer Workshop on Information Management (CSWIM)  
Conference on Information Systems and Technology (CIST)  
Hawaii International Conference on System Sciences (HICSS)  
International Conference on Information Systems (ICIS)  
The Workshop on E-Business (WEB)  
Pacific Asia Conference on Information Systems (PACIS)

**Consulting Projects**

2022 – 2023: Pearson Higher Education, Technical Review for the 10<sup>th</sup> edition of "Database Concepts"  
2020 – 2021: Elsevier INC, Textbook proposal and sample chapter review for "Full-Stack Web Development"  
2013 – 2014: Certification Management Services, Exam rewriting  
2008 – 2009: MSU TX Department of Nursing, Automatic Grading Tools for Nursing Competence Test.

**Professional Memberships**

Decision Sciences Institute (DSI)  
Decision Sciences Institute, Southwest Region (SWDSI)  
Association for Computing Machinery (ACM)  
Association of Information Systems (AIS)  
Institute of Operations Research and Management Science (INFORMS)

## **Committee Services**

### University Committees

2022 – 2024: University Core Curriculum Committee  
2020: University Tenure and Promotion Policy Review Committee  
2015 – 2024: University Assessment Committee for SACSCOC Accreditation  
2007 – Present: Academic Technology / Information Technology Advisory Committee  
2013 – 2015: University Core Curriculum Committee  
2012 – 2015: Academic Appeals Committee  
2012 – 2013: Mortar Board Faculty Sponsor  
2011 – 2012: Annual Staff Service Award Selection Committee  
2008 – 2009: Faculty Senators  
2007 – 2008: BAAS Advisory Committee

### College Committees

2024 – Present: College Council Member  
2021 – 2022: College Tenure and Promotion Guidelines Task Force - Chair  
2015 – 2024: Assurance of Learning Committee for AACSB Accreditation - Chair  
2013 – Present: Online Learning Committee – Chair  
2013 – Present: College Tenure and Promotion Committee  
2010 – Present: Research and Teaching Sedona System for AACSB Accreditation - Administrator  
2010 – Present: Beta Gamma Sigma Faculty Sponsor  
2010 – 2024: Association for Information Technology Professionals (AITP) Faculty Sponsor  
2009 – Present: College Graduate Program Committee  
2009 – Present: Various Search Committees (Chair or Member) for Faculty (Marketing, Economics, MIS, Accounting) and Staff (Accreditation Manager)  
2010 – 2011: Webpage Redesign Task Force  
2008 – 2009: College Scholarship Committee

### Profession

2018 – 2019: INFORMS Pro Bono Analytics Program Participant. Worked for BBBS Central Arizona, INFORMS Pro bono Analytics Program. Volunteered to help with Big Future project regarding survey design, alignment with strategic goals, data collection, and reporting.  
2010 – Present: Campus Representative, Decision Sciences Institute, Southwest Region

## **Professional Development and Certifications**

2022: RapidMiner Machine Learning Professional and Master Certifications.  
2019: Coursera "Data Engineering on Google Cloud Platform Specialization" Certifications on Building Resilient Streaming Systems on the Google Cloud Platform, Serverless Machine



- Learning with TensorFlow on Google Cloud Platform, Serverless Data Analysis with Google BigQuery and Cloud Dataflow, Leveraging Unstructured Data with Cloud Dataproc on Google Cloud Platform, Google Cloud Platform Big Data and Machine Learning Fundamentals
- 2019: IBM Cognitive Class Certifications in Data Science, Data Analysis, and Data Visualization with Python and Hadoop.
- 2017: edX MITx "Introduction to Computer Science and Programming Using Python," MIT edX online certification of completion.
- 2017: Local University Workshop on Google Search, Wichita Falls, Texas.
- 2016: AACSB Assessment Training Workshop Level II, Charlotte, North Carolina.
- 2015: Apply Q.M. Rubrics – Quality Matters Certification, Q.M. online training center.
- 2012: Workshop of Mobile Application Development, Decision Sciences Institute, Southwest Region, New Orleans, Louisiana.
- 2012: TLRC Grant Application Workshop, Wichita Falls, Texas.
- 2012: Desire2Learn Training, Wichita Falls, Texas.
- 2011: SPIN Training Faculty Research Workshop, Wichita Falls, Texas.
- 2011: DCOBA STAR lab - Bloomberg Training, Wichita Falls, Texas.
- 2011: TLRC Grant Application Workshop, Wichita Falls, Texas.
- 2010: AACSB Beta Gamma Sigma Faculty Advisor Workshop, Chicago, Illinois.
- 2010: AACSB Annual Accreditation Conference, Houston, Texas.
- 2009: Workshop of Business Intelligence, Decision Sciences Institute, Southwest Region, Oklahoma City, Oklahoma.

## **Awards and Honors**

- 2021: CSWIM 2021 Best Reviewer Award, CSWIM. Award recipient of Best Reviewer of CSWIM 2021
- 2011: Excellence in Research, Dillard College of Business Administration
- 2010: Internship Program Faculty Sponsor of the Year, Dillard College of Business Administration
- 2010: Excellence in Teaching, Dillard College of Business Administration
- 2009: Excellence in Research, Dillard College of Business Administration
- 2007: Beta Gamma Sigma Honor Society
- 2007: Dissertation Fellowship, Graduate School Fellowship competition, University of Washington.
- 2006: Boeing Fund of Academic Excellence Awards, University of Washington
- 2005: Boeing Fund of Academic Excellence Awards, University of Washington
- 2004: Dean's Award for excellent Ph.D. students, University of Washington
- 2003: Graduate School Excellence and Innovation Award, University of Washington
- 1999: Oriental Overseas Foundation Scholarship, Shanghai Jiao Tong University
- 1993 – 1997: Undergraduate Students Excellence Award, Shanghai Jiao Tong University

## **References**

Upon Request.