Tianjie Deng

Associate Professor, Department of Business Information & Analytics
Daniels College of Business, University of Denver
Tianjie.Deng@du.edu

Education

2009 - 2015   Ph.D., Computer Information Systems, Georgia State University, Atlanta

2007 - 2009   M.S., Human-Computer Interaction, Georgia Institute of Technology, Atlanta

2002 - 2006   B.E., Software Engineering, Nanjing University, Nanjing, China

Professional Experience

2023 - present   Associate Professor (tenured), Department of Business Information & Analytics, Daniels College of Business, University of Denver, Denver, CO

2015 - 2023   Assistant Professor, Department of Business Information & Analytics, Daniels College of Business, University of Denver, Denver, CO

2009 - 2015   Graduate Research Assistant, Georgia State University, Atlanta, GA

2008 - 2009   Graduate Research Assistant, Georgia Institute of Technology, Atlanta, GA

2009   Web Engineer Intern, Myfifident Foundation, Roswell, GA

2006   Software Engineer Intern, Kingdee Corp, Chongqing, China

Research Interests

Healthcare analytics, User-generated content, Online communities, Electronic word-of-mouth, Behavioral changes, Routines, Open-source software development

Research Methods

Natural language processing, Social network analysis, Data mining, Econometrics, Artificial Intelligence

Refereed Journal Articles (#9)

1. **Deng, T.,** Adhikari, AB., Lee, YJ., Bender, K., Dewri, R. (2022) Substance Use and Sentiment and Topical Tendencies: A Study Using Social Media Conversations of Youth Experiencing Homelessness. *Information Technology & People*.
2. **Deng, T**., Xu, P, Lee, YJ. (2022) Policy Responses to COVID-19 and Stock Market Reactions - An International Evidence. *Journal of Economics and Business*, 119, 106043.

3. **Deng, T**., Lee, YJ, Xie, K. (2021) Managers' Responses to Online Reviews for Improving Firm Performance: A Text Analytics Approach. *Communications of the Association for Information Systems*, 49, 699-728.

4. Lee, H. K., **Deng, T.**, & Sarkar, S. (2021) Developing CRMSys at SoftTel: Traditional or Agile? *Journal of Information Technology Case and Application Research, 22*(4), 279-302.

5. **Deng, T.**, & Robinson, W. N. (2021). Changes in Emergent Software Development Routines: The Moderation Effects of Routine Diversity. *International Journal of Information Management*, 58, 102306.

6. **Deng, T.** (2020). Investigating the Effects of Textual Reviews from Consumers and Critics on Movie Sales. *Online Information Review*, *44*(6), 1245–1265.

7. Robinson, W. N., **Deng, T.**, & Aria, A. (2020). Monitoring Behaviours with Model Divergence: Emailing Studies of Users with Cognitive Impairment. *Health Systems*, *9*(1), 1–19.

8. Keil, M., Lee, H. K., & **Deng, T.** (2013). Understanding the Most Critical Skills for Managing IT Projects: A Delphi Study of IT Project Managers. *Information and Management*, *50*(7), 398–414.

9. Robinson, W.N., Akhlaghi, A., Deng, T., & Syed, A. R. (2012). Discovery and Diagnosis of Behavioral Transitions in Patient Event Streams. *ACM Transactions on Management Information Systems*, *3*(1), 1–28.

Papers under Review (#1)

1. Lee, YJ., Xie, K, Besharat, A, **Deng, T.**, Tan, Y. Focusing on the Bottom Line: Should Managerial Responses to Online Word-of-Mouth be Prescriptive? (*Production and Operations Management,* **FT 50,** under second-round review since 06/15/2023)

Work in Progress (#9)

1. **Deng, T.**, Urbaczewski, A., Lee, YJ., Adhikari, AB., Dewri, R. Narrowing the Margins: A Social Media-based Framework for Identifying Substance Use among Homeless Youth. Status: Revising to submit to *Decision Sciences*

2. **Deng, T.,** Robinson, W.N., Lindberg, A. Collaboration and Popularity in Open Source Projects: Examining the Mediating Role of Emergent Routines. Status: Finalizing to submit to *Communications of the Association for Information Systems*

3. **Deng, T.**, Tripathi, A., Lee, YJ., Basu, A. Information Leakage through Q&A in Online Auction Platforms. Status: Manuscript writing to submit to *Management Science*

4. **Deng, T.**, Tripathi, A., Lee, YJ., Basu. Measuring Information Accumulation in Information Exchange: A Text-mining based Framework. Status: Manuscript writing to submit to *Decision Support Systems*

5. **Deng, T.,** Dong, T, Lee, YJ. The Influence of Reputation and Social Position on Critic Review Behavior. Status: Manuscript writing to submit to *Communications of the Association for Information Systems*

6. Wu, D., **Deng, T.**, Tao, Y. How emotions affect information diffusion associated with mental health coping strategies on social media platforms during the Covid-19 pandemic? Status: Data collection and analysis. Target: *Journal of Medical Internet Research*

7. **Deng, T.**, Urbaczewski, A., Lee, YJ., Adhikari, AB., Dewri, R. How Do Marginalized Groups Use Social Media? Online Social Signaling and Support of Young Adults Experiencing Homelessness. Status: Data analysis. Target: TBD

8. **Deng, T.,** Dong, T, Lee, YJ, Tan, Y. Are Critics Really Unbiased? – Social Herding in Movie Reviews. Status: Data analysis. Target: *MIS Quarterly*

9. Lee, H.K., **Deng, T.** and Sarkar, S. Reporting Information Security Policy Violations – A Mixed-Method study. Status: Data analysis. Target: TBD

Book Chapters (#1)

1. Robinson, W.N., **Deng, T.,** & Aria, A. (2020). Guiding Assistive-Technology Adaptations Through Intelligent Stream Mining of Patient Data. In *Theory and Practice of Business Intelligence in Healthcare*. IGI Global, 2020. 216-255.

Refereed Proceedings/Workshop Publications (#15)

1. Urbaczewski, A., **Deng, T.** (2023)**.** Predicting Fraud in Initial Coin Offerings: A Mixed Methods Approach. *The 29th Americas Conference on Information Systems*. Panama City, Panama.

2. **Deng, T.,** Dong, T., Lee, YJ. (2023) The Influence of Professional Embeddedness and Public Reputation on Critic Review Behavior. *The 29th Americas Conference on Information Systems*. Panama City, Panama.

3. Peña, T, Dong, T, **Deng, T**. (2021). Effects of COVID‐19 on Critics? Rating Behavior. *The Nineteenth Workshop on e-Business.* Virtual conference.

4. Lee, H.K., **Deng, T**. (2020). Using Cloud-Based Tools to Facilitate the Teaching of Machine Learning in Introductory IS Courses. *2020 International Conference on Information Systems*. Hyderabad, India.

5. **Deng, T.**, Lee, H. K., & Sarkar, S. (2019). Reporting Information Security Policy Violations–An Exploratory Study. *The 25th Americas Conference on Information Systems*. Cancun, Mexico.

6. **Deng, T.**, Lee, Y.J., Xie, L. (2018). Management Responses to Online Hotel Reviews: Text Mining to Lift Sales. *The 22nd Pacific Asia Conference on Information Systems*. Yokohama, Japan.

7. **Deng, T.**, and Robinson, W.N. (2017). The Interplay of Routine Change and Network Structure in Open Source Software Development Projects. *The 11th China Summer Workshop on Information Management*. Nanjing, China.

8. **Deng, T.**, and Robinson. (2016). Drivers and Impact of Routine Diversity and Change in Open Source Projects. *The 10th China Summer Workshop on Information Management.* Dalian, China.

9. Robinson, W.N., **Deng, T.**, Qi, Z. (2016). Developer Behavior and Sentiment from Data Mining Open Source Repositories. The *49th Hawaii International Conference on System Sciences (HICSS)*. Koloa, HI, USA.
10. **Deng, T.** and Robinson, W.N. (2015). Diversity in Software Development Routines are Attractive: A Preliminary Analysis of GitHub Repositories. *2015 Americas Conference on Information Systems*. Puerto Rico, USA.
11. Robinson, W.N. and **Deng. T.** (2015). Data Mining Behavioral Transitions in Open Source Repositories. *The 48th Hawaii International Conference on System Science (HICSS).* Kauai, HI, USA.
12. Robinson, W.N., Akhlaghi, A, & **Deng, T.** (2013). Transition Discovery of Sequential Behaviors in Email Application Usage Using Hidden Markov Models. *The 46th Hawaii International Conference on System Sciences (HICSS)*. Maui, HI, USA.
13. Robinson, W.N., Syed, A.R., Akhlaghi, A, & **Deng, T.** (2012). Pattern Discovery of User Interface Sequencing by Rehabilitation Clients with Cognitive Impairments. *The 45th Hawaii International Conference on System Science (HICSS)*. Maui, HI, USA.
14. Robinson, W.N., Akhlaghi, A, **Deng, T.**, & Syed, A.R. (2011). Diagnosing Stream-Mined Model Changes of Monitored Requirements for Cognitive Rehabilitation. *The 44th Hawaii International Conference on System Sciences (HICSS)*. Kauai, HI, USA.
15. Vandenberg, A, Vaishnavi, V.K., Duraisamy S, & **Deng, T.** (2010). Dynamically Generating Context-relevant Sub-webs. *2010 International Conference on Design Science Research in Information Systems*. St. Gallen, Switzerland.

Refereed Conference Presentations (#7)

1. Wu, D, **Deng, T.**, Tao, Y. (2022). How Emotions Affect Information Diffusion Associated with Mental Health Coping Strategies on Social Media Platforms during the Covid-19 Pandemic? *INFORMS Annual Meeting,* Indianapolis, Indiana, October 2022*.
2. Peña, T, Dong, T, **Deng, T**. (2021). Effects of COVID‑19 on Critic's Rating Behavior. *The Nineteenth Workshop on e-Business.* Virtual, December 2021*.
3. "Management Responses to Online Hotel Reviews: Text Mining to Lift Sales," *The 22nd Pacific Asia Conference on Information Systems*. Yokohama, Japan, June 2018.
4. "The Interplay of Routine Change and Network Structure in Open Source Software Development Projects," *The 11th China Summer Workshop on Information Management*. Nanjing, China, June 2017.
5. "Drivers and Impact of Routine Diversity and Change in Open Source Projects," *The 10th China Summer Workshop on Information Management*. Dalian, China, June 2016.
6. "Diversity in Software Development Routines are Attractive: A Preliminary Analysis of GitHub Repositories," *2015 Americas Conference on Information Systems*. Puerto Rico, August 2015.
7. "Data Mining Behavioral Transitions in Open Source Repositories," *The 48th Hawaii International Conference on System Science (HICSS)*. Kauai, HI, January 2015.

*presented by coauthors

Non-Refereed (Invited) Presentations (#11)

1. "How Do Marginalized Groups Use Social Media? Online Social Signaling and Support of Young Adults Experiencing Homelessness", MIS Quarterly Author Development Workshop, Virtual, February 2022.
2. "Management Responses to Online Hotel Reviews: Text Mining to Lift Sales," The 6th Front Range Research Seminar, Business School, University of Colorado Denver, Denver, CO, April 2019.
3. University of Denver, Ph.D. Immersion Seminar, Denver, CO, January 2019.
4. "Tourism Marketing Big Data Analysis and Operation Assessment", Chongqing Normal University, Chongqing, China, July 2017.
5. University of Denver, Faculty Research Colloquium, Denver, CO, October 2016.
6. Georgia State University, Atlanta, GA, September 2015.
7. University of Denver, Denver, CO, February 2015.
8. Rochester Institute of Technology, Rochester, NY, January 2015.
9. St. Mary College of California, Oakland, CA, January 2015.
10. Lamar University, Beaumont, TX, November 2014.
11. Conference of the Southern Association for Information Systems, Macon, GA, August 2014.

Industry Presentations (#1)

1. Big Data Monthly @ Arrow Electronics, August 2021.

Media Mentions

1. The influence of online movie reviews at DU News (https://www.du.edu/news/qa-influence-online-movie-reviews)
2. Q&A: How COVID lockdowns and financial policies affected the stock market at DU News (https://www.du.edu/news/qa-how-covid-lockdowns-and-financial-policies-affected-stock-market)

Awards

2019   Research Summer Support, University of Denver
2018   Research Summer Support, University of Denver
2017   Research Summer Support, University of Denver
2016   Research Summer Support, University of Denver
2012   GTA Teaching Excellence Award, Robinson College of Business, Georgia State University
2005   Renming Scholarship, Special Prize, Nanjing University
2004   Renming Scholarship, 3rd Place, Nanjing University
2003   Renming Scholarship, 2nd Place, Nanjing University

Courses Taught and Evaluation

Assistant Professor, Daniels College of Business, University of Denver, 2015-present

Course	Audience	Frequency	Mode	Average SET Score
INFO 1010: Analytics I: Data Management and Analysis	Undergraduate (business core)	5	In-person	5.51/6
INFO 1020: Analytics II: Business Statistics and Analysis	Undergraduate (business core)	11	In-person, Online	5.38/6
INFO 3400: Complex Data Analytics	Undergraduate (BIA core)	11	In-person, Online	5.38/6
INFO 4360: Complex Data Analytics	Graduate (BIA core)	6	In-person, Online, Hybrid	5.33/6

Graduate Instructor, Robinson College of Business, Georgia State University, 2009 – 2015

Course	Audience	Frequency	Mode	Average SET Score
Introduction to Computer-based Information Systems	Undergraduate	5	In-person	4.3/5
Systems Analysis	Undergraduate	5	In-person, Online	4.5/5
Introduction to Database Systems	Undergraduate	1	Online	4.4/5
Enterprise Architecture	Graduate	1	In-person	N/A secondary instructor

Program Committees

- China Summer Workshop on Information Management, virtual, June 2021
- China Summer Workshop on Information Management, virtual, June 2020
- China Summer Workshop on Information Management, Nanjing, China, 2017

Session Chair/Track Chair

- Session Chair, INFORMS Annual Meeting, Anaheim, CA, October 2021
- Minitrack Chair, Americas Conference on Information Systems, virtual, August 2021
- Session Chair, China Summer Workshop on Information Management, virtual, June 2021

- Minitrack Chair, Americas Conference on Information Systems, virtual, August 2020
- Session Chair, INFORMS Annual Meeting, Seattle, WA, October 2019
- Minitrack Chair, Americas Conference on Information Systems, Cancun, Mexico, August 2019
- Minitrack Chair, Americas Conference on Information Systems, New Orleans, LA, August 2018
- Minitrack Chair, Americas Conference on Information Systems, Boston, MA, August 2017
- Minitrack Chair, Americas Conference on Information Systems, San Diego, CA, August 2016

Associate Editor

- International Conference on Information Systems, Copenhagen, Denmark, December 2022
- Pacific Asia Conference on Information Systems, virtual, July 2022

Reviewer Service

Reviewer for *MIS Quarterly, Information & Management, Information Systems Management, Information Technology & People, Journal of Management Information Systems, Communications of the Association for Information Systems, Information and Organization, Journal of Management Analytics, Journal of Medical Internet Research, Academy of Management Annual Meeting, China Summer Workshop on Information Management, European Conference on Information Systems, Workshop on Information Technologies and Systems, Hawaii International Conference on System Sciences, Americas Conference on Information Systems, International Conference on Information Systems*

Service to the University

- Business Information and Analytics Faculty Search Committee, 2016, 2021
- Departmental Library Liaison, Library Liaison Advisory Group, 2016 – present
- INFO Core Redevelopment, 2016
- Capstone Advisor (19 students): Alyssa Deichmann, Henry Valuck, Michael A. Hurwitz, Jake Medvene, Rui Zhang, Edward Zhang, Nora Phuang, Zifan Cao, Leslie Yang, Karen Huang, Yao Liu, Sijie Liu, Miguel Gerov Hellmund, Dan Bourdeau, Andres Orozco, Yiwei Zou, Eric Janes, Hongbo Zhu, Tong Li

Professional Membership

Institute for Operations Research and Management Science (INFORMS)

Association for Information Systems (AIS)