

Dr. HSIA-CHING CHANG

Associate Professor
Department of Information Science
College of Information
University of North Texas

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RESEARCH INTERESTS

Cybersecurity, Human-AI Interaction/Collaboration, Social Media Analytics, Knowledge Mapping, Mixed-Methods, Scientometrics

EDUCATION

University at Albany, State University of New York

Ph.D. in Information Science, 2006 ~ 2011

- Dissertation: “Rehashing Information Architecture: Exploring Human-Information Interaction of Collaborative Tagging Using Twitter Hashtags.” Advisor: Dr. Hemalata Iyer
- Highlights in my dissertation: By conducting the API data analytics, this study applied the diffusion of innovations theory to compare multifaceted information architectures and explained adoption and diffusion of new communication behavior, hashtagging.
- Primary Concentration: Knowledge Management and Organization
- Secondary Concentration: Information, Government, and Democratic Society

University at Albany, State University of New York

Master's Degree in Information Science, 2004 ~ 2006

- Concentration: Information Management and Policy

National Taipei University, Taiwan

Master's Degree in Public Policy, 1997

- Concentration: Urban Policy
- Thesis: “Real Estate Developer Regulatory Policy in Taiwan: A Planning Evaluation Research Approach”

National Taipei University, Taiwan

Bachelor's Degree in Real Estate & Built Environment, 1995

ACADEMIC POSITION

Department of Information Sciences, College of Information, University of North Texas

Associate Professor

September 2020 ~ Present

Assistant Professor

August 2014 ~ August 2020

- **Course developed:** DTSC 4430 Cloud Security for Data Scientists, INFO 5737 Information and Cyber Security
- **Courses taught:**
 - INFO 5000 Information and Knowledge Professions
 - INFO 6000 Seminar in Information Science
 - INFO 5040 Information Behavior
 - INFO 5307 Knowledge Management Tools and Technologies
 - INFO 5737 Information and Cyber Security
 - INFO 4910 Special Problems (Cybersecurity)
 - INFO 5910 Special Problems (Cyber Physical Systems; Security Analytics)
 - INFO 6660 Readings in Information Science
 - INFO 6940 Seminar in Research and Research Methodology: Inquiry and Research Design
 - INFO 6900 Special Problems (KM Tools and Technologies in Cybersecurity, Analytics and KM, Scientometrics; Security and Privacy Challenges on the Internet of Things; Data Literacy; KM Tools and Technologies in Healthcare; Agile Practices in Data Science/Analytics Project; Cybersecurity Education)
- **PhD/Master's students supervised:**
 - Doctoral Dissertation Committee Chair:
 - Graduated: Schenita Floyd; Cary Jim; Elizabeth Dunn Rawlings
 - Mary Suttle; Melissa Vang; Liyu Yang
 - Doctoral Dissertation Committee Co-Chair: Hammad Khan; Teala DeVries
 - Doctoral Dissertation Committee Member: Moneerah Alboulayan; Yousef Alfarhoud; Reem Alkhaledi; Najla Almousa; Amal Alomran; Manar Alsaïd; Laxmigayathri Challa; Ava Hajian; Kathryn Hays; Ijay Kaz-Onyeakazi; Janette Klein; Sangyung Lee; JoAnn Livingston; Nayana Pampapura Madali; Eric Upchurch; Elise Victor; Yuan Zhang; Liyu Yang; Tara Zimmerman
 - Doctoral Advising Committee (as a Major Professor): Hector Valdes; Andrew Holmes
 - Master's Thesis Committee Member: Danielle Snyder (Anthropology)

Graduate School of Education Communications & Technology, National Taipei University of Education

Adjunct Assistant Professor

2013

Department of Informatics, University at Albany, State University of New York

Lecturer

2009

Department of Informatics, University at Albany, State University of New York

Teaching & Research Assistant

2008

Department of Information Studies , University at Albany, State University of New York Lecturer	2007 ~ 2008
Department of Information Studies , University at Albany, State University of New York Teaching & Research Assistant	2006 ~ 2007
New York State Department of Correctional Services (DOCS) and Center for Technology in Government (CTG) , University at Albany, State University of New York Research Assistant for the Electronic Health Record (EHR) Business Analysis Project	2006
Taiwanese Student Association (TSA) , University at Albany, State University of New York Web Administrator	2005 ~ 2006
Graduate Institute of Urban Planning , National Taipei University, Taipei, Taiwan Full-time Research Assistant	1996 ~ 1998
<u>INDUSTRY EXPERIENCE</u>	
New America	2018 ~ 2020
Cybersecurity Initiative Fellow	
CrystalWave Analytics	2012 ~ 2014
Founder	
HyWeb Technology Co., Ltd. , Taipei, Taiwan Project Manager	2011 ~ 2012
Asia Online Inc. (subdivision of All Products Online Corp.) , Taipei, Taiwan Web Product Manager	2000 ~ 2002
Taigine Technology Inc. , Taipei, Taiwan Project Planner	1999 ~ 2000
Ching Huan Consulting Inc. , Taipei, Taiwan Market Analyst	1998 ~ 1999

PUBLICATIONS

Refereed Journal Articles:

Chang, H.-C., Lund, B. D., Beuerlein, E., and Mote, C. (2025) Investigating the symbiotic relationship between artificial intelligence and blockchain to promote zero-trust cybersecurity in an evolving information ecosystem. *Information Discovery and Delivery*. DOI: 10.1108/IDD-11-2024-0185

Atolagbe-Olaoye, A., **Chang, H.-C.**, & Hawamdeh, S. (2025). Exploring collaborative tools in collaborative information behaviour research: A scoping review. *Journal of Information Science*, 01655515251353169. DOI: 10.1177/01655515251353169

Hajian, A., Prybutok, V. R., & **Chang, H.-C.** (2023). An Empirical Study for Blockchain-Based Information Sharing Systems in Electronic Health Records: A Mediation Perspective. *Computers in Human Behavior*, 138, 107471. DOI: 10.1016/j.chb.2022.107471

Hajian, A., Prybutok, V. R., & **Chang, H.-C.** (2023). How Do Morning and Friendly Ads Influence Mobile Advertising? A Mediation Perspective Using Appraisal Theory. *Journal of Marketing Communications*, 29(5), 510-532. DOI: 10.1080/13527266.2022.2053869

Chang, H.-C., & Wang, C.-Y., Hawamdeh, S. (2019). Emerging Trends in Data Analytics and Knowledge Management Job Market: Extending KSA Framework. *Journal of Knowledge Management*, 23(4), 664-686. DOI: 10.1108/JKM-02-2018-0088

Chang, H.-C., & Wang, C.-Y. (2019). E-Memory Choice Architecture: Modeling the Use Diffusion of Twitter Archiving System. *International Journal of Online Marketing*, 9 (1), 24-37. DOI: 10.4018/IJOM.2019010102

Wang, C.-Y. & **Chang, H.-C.** (2019). Choice Modeling of Enterprise Social Media Adoptions. *International Journal of E-Adoption*, 11(1), 12-24. DOI: 10.4018/IJEA.2019010102

Zhang, Y. & **Chang, H.-C.** (2018). Structural Analysis of Medical-Terminology versus Lay-Language Hashtag Collections on Twitter: An Information Theoretical Method with Entropy Matrix. *Data and Information Management*, 2(3), 153-174. DOI: 10.2478/dim-2018-0011

Wang, C.-Y., Lin, Y. C., **Chang, H.-C.**, & Chou, S.T. (2017). Consumer Sentiment in Tweets and Coupon Information-Sharing Behavior: An Initial Exploration. *International Journal of Online Marketing*, 7(3), 1-19. DOI: 10.4018/IJOM.2017070101

Chang, H.-C. (2016). The Synergy of Scientometric Analysis and Knowledge Mapping with Topic Models: Modeling the Development Trajectories of Information Security and Cyber Security Research, *Journal of Information & Knowledge Management*, 15(4), 1650044-1~1650044-33. DOI: 10.1142/S0219649216500441

Chang, H.-C. & Wang, C-Y. (2015). Unveiling the Co-word Structures among Mobile Computing, Mobile Commerce and Mobile Application Research: A Science Mapping Analysis, *International Journal of Electronic Commerce Studies*, 6(2), 243-258. DOI: 10.7903/ijecs.1330

Chang, H.-C. & Iyer, H. (2012). Trends in Twitter Hashtag Applications: Design Features for Value- Added Dimensions to Future Library Catalogs, *Library Trends*, 61(1), 248-258. DOI: 10.1353/lib.2012.0024

Chang, H.-C. & Maxwell, T. A. (2007). A Synergistic Alternative to Readers' Advisory Services: Managing Customer Knowledge, *Information Research*, 12(4).

Refereed Conference Proceedings:

Lyles, J. and **Chang, H.-C.** (2025). Smart Devices, Smarter Cybersecurity: Leveraging Zero Trust and Artificial Intelligent for IoT Networks, *The Multidisciplinary Information Research Symposium (MIRS 2025)*, Denton, Texas, February 21, 2025. **(Linda Schamber Best Paper Award)**

Vang, M. and **Chang, H.-C.** (2025). Georgia Tech AI Makerspace as a Third Space: A Case Study, *The Multidisciplinary Information Research Symposium (MIRS 2025)*, Denton, Texas, February 21, 2025.

Vang, M. and **Chang, H.-C.** (2024). From Chatbots to AI Chatbots: An Exploratory Website Content Analysis in Academic Libraries, *The 19th International Conference on Knowledge Management (ICKM 2024)*, Kent, Ohio, October 22~24, 2024.

Suttle, M. L. & Kim, H.J. & **Chang, H.-C.** & Wang, X. (2024) A Case Study in Understanding Information Sharing of a Fast Fashion Brand H&M Regarding Sustainability, *The 6th International Conference on Advanced Research Methods and Analytics (CARMA 2024)*, Valencia, Spain, June 26~28, 2024.

Atolagbe-Olaoye, A. and **Chang, H.-C.** (2023). A Scoping Review of Collaborative Information Behavior: Definitions and Collaborative Tools. *Proceedings of the Association for Library and Information Science Education (ALISE) 2023 Annual Conference*, Milwaukee, Wisconsin, October 2-5, 2023.

Dunn Rawlings, E. and **Chang, H.-C.** (2023). The Metaverse as Information Grounds: A Case Study of Metaversities. *Proceedings of the Association for Library and Information Science Education (ALISE) 2023 Annual Conference*, Milwaukee, Wisconsin, October 2-5, 2023.

Holagh, S.R. and **Chang, H.-C.** (2023) Exploring the Trends in Medical or Healthcare Chatbots Research across Disciplines: A Pilot Study, *Multi-Disciplinary Information Research Symposium (MIRS) 2023*, Denton, Texas, November 30, 2023.

Bernot, J. and **Chang, H.-C.** (2020) Knowledge Management in Cybersecurity Education Using Concept Maps, *The 16th International Conference on Knowledge Management (ICKM 2020)*, Durham, North Carolina, December 3~5, 2020.

Chang, H.-C. and Zimmerman, T. (2019) Navigating the Role of Mobile Technologies in Shaping Information Behavior: A Meta-synthesis. *Proceedings of the Association for Library and Information Science Education (ALISE) 2019 Annual Conference*, Knoxville, Tennessee, September 24-26, 2019.

Jim, C. & **Chang, H.-C.** (2018). The Current State of Data Governance in Higher Education, *American*

Society for Information Science and Technology (ASIS&T 2018) Annual Meeting, Vancouver, Canada, November 10-14, 2018.

Khan, H. & Kim, J. & **Chang, H.-C.** (2018). Toward an Understanding of Data Literacy. *iConference 2018*, Sheffield, UK, March 25-28, 2018.

Zhang, Y. & **Chang, H.-C.** (2018). Selfies of Twitter Data Stream through the Lens of Information Theory: A Comparative Case Study of Tweet-trails with Healthcare Hashtags, *Proceedings of the 51st Hawaii International Conference on System Sciences (HICSS 2018)*, Hawaii, January 3-6, 2018.

Wang, X., **Chang, H.-C.**, Chen, J., & Yang, J. (2017) Data Analytics Applied in CNKI Databases Search Log: Using data analytics techniques to understand Chinese content users' interest and interaction patterns, *The 13th International Conference on Knowledge Management (ICKM 2017)*, Dallas/Fort Worth, Texas, October 24~26, 2017.

Zhang, Y. & **Chang, H.-C.** (2017) Decomposing and Visualizing the Twitter Data Stream with Healthcare Hashtags: An Information Theoretical Perspective, *The 13th International Conference on Knowledge Management (ICKM 2017)*, Dallas/Fort Worth, Texas, October 24~26, 2017. **(Best Paper Award)**

Chang, H.-C. & Wang, C.-Y. & Zhang, Y. (2017). Better Together? A Scoping Review of Integrating Knowledge Mapping Tools in Teaching and Learning. *iConference 2017*, Wuhan, China, March 22-25, 2017.

Chang, H.-C. & Squires, S. & Wang, C.-Y. (2016). Using Trace Ethnography to Compare Perceived Cyber Threats of IT to Non-IT Professionals, *The 22nd Americas Conference on Information Systems (AMCIS 2016)*, San Diego, August 11-14, 2016.

Chang, H.-C. & Zhang, Y. (2016). Discovering Hashtag Trails with Cross-Platform Hashtag Search Engines: A State-of-Art Analysis. *iConference 2016*, Philadelphia, March 20-23, 2016.

Chang, H.-C. (2015). Information Security and Cyber Security Research: A Scientometric Analysis and Knowledge Mapping Approach, *The 11th International Conference on Knowledge Management (ICKM 2015)*, Osaka, Japan, Nov. 4~6, 2015. **(Osaka Prefecture University President Award)**

Chang, H.-C. & Wang, C.-Y. (2015). Cloud Incident Data Analytics: Change-point Analysis and Text Visualization, *Proceedings of the 2015 48th Hawaii International Conference on System Sciences (HICSS 2015)*, Hawaii, January 5-8, 2015.

Chang, H.-C. & Wang, C.-Y. (2014). Mapping the Enterprise Architecture Knowledge Landscape, *Proceedings of the Symposium on Enterprise Architecture and Information Technology (SEAIT 2014)*, Taipei, Taiwan, November 8, 2014.

Chang, H.-C. & Wang, C.-Y. (2014). Mapping Conceptual Networks of Mobile Computing and Applications Research Using Co-Word Analysis, *International Conference on Applied and Theoretical Information Systems Research (ATISR 2014)*, Taipei, Taiwan, June 18-20, 2014.

Chang, H-C. & Wang, C-Y., (2013). Grey Forecasting Models for Social Media Adoptions of Transnational Enterprises, *Proceedings of the 2013 International Symposium on Computer, Communication, Control and Automation (3CA 2013)*, Singapore, December 1-2, 2013.

Wang, C.Y., **Chang, H.-C.**, and Chou, S.T., Chen, F-F. (2013). Acceptance and Willingness to Pay for Mobile TV Apps, *Proceedings of the 17th Pacific Asia Conference on Information Systems (PACIS 2013)*, Jeju Island, Korea, June 18-22, 2013.

Chang, H.-C. and Wang, C.Y. (2011). A Preliminary Forecasting with Diffusion Models: Twitter Adoption and Hashtags Diffusion, *The 11th International Decision Sciences Institute and the 16th Asia Pacific Decision Sciences Institute Joint Meeting (IDSI & APDSI 2011)*, Taipei, Taiwan, July 12 – 16, 2011.

Chang, H.-C. and Wang, C.Y. (2011). No Cue, No Clue? Understanding Information Interaction in Social Bookmarking Services, *Proceedings of the 8th International Conference on Information Technology: New Generations, Social Computing Track (ITNG 2011)*, Las Vegas, Nevada, April 11-13, 2011.

Wang, C.Y. and **Chang, H.-C.** (2011). Managing Expertise: Toward the Socio-Technical Perspective, *Proceedings of the International Conference on Computer and Management (Caman 2011)*, Wuhan, China, May 19-21, 2011.

Chang, H.-C. (2010). A New Perspective on Twitter Hashtag Use: Diffusion of Innovation Theory, *American Society for Information Science and Technology (ASIS&T 2010) Annual Meeting*, Pittsburgh, PA, October 22-27, 2010.

Wang, C.Y., Chou, S.T. and **Chang, H.-C.** (2010). Exploring an Individual's Intention to Use Blogs: The Roles of Social, Motivational and Individual Factors, *Proceedings of the 14th Pacific Asia Conference on Information Systems (PACIS 2010)*, Taipei, Taiwan, July 9-12, 2010.

Chang, H.-C. (2009). Emotion Barometer of Reading: User Interface Design of a Social Cataloging Website, *ACM Conference on Human Factors in Computing Systems (CHI 2009)*, Student Research Competition, Boston, MA, April 4-9, 2009.

Wang, C.Y., Chou, S.T. and **Chang, H.-C.** (2009). Examining the Impacts of Perceived Value and Perceived Quality on Users' Intention to Join Web 2.0 Communities, *Proceedings of the 11th International Conference on Electronic Commerce (ICEC 2009)*, Taipei, Taiwan, August 12-15, 2009.

Wang, C.Y., Chou, S.T. and **Chang, H.-C.** (2009). The Moderating Role of Utilitarian/Hedonic User Motivation on User Behaviour towards Web 2.0 Applications, *Proceedings of the 17th European Conference on Information Systems (ECIS 2009)*, Verona, Italy, June 8-10, 2009.

Wang, C.Y., Chou, S.T. and **Chang, H.-C.** (2009). Emotion and Motivation: Understanding User Behavior of Web 2.0 Application, *Proceedings of the 6th International Conference on Information Technology: New Generations (ITNG 2009)*, Las Vegas, Nevada, April 27-29, 2009.

Chang, H.-C. (2008). E-Government and the Surge of Web 2.0, *International Association for Development of the Information Society (IADIS) e-Society 2008*, Portugal, April 8-12, 2008.

Chang, H.-C. & Wang, C.Y. (2002). Communities of Practice in Knowledge Management. *Third Internet Application and Development Symposium, Virtual Community Track*, Far East College,

Taiwan, May 2002.

Books:

Chang, H.-C. & Hawamdeh, S. (eds.). (2020). *Cybersecurity for Information Professionals: Concepts and Applications*, CRC Press, Taylor & Francis Group.

Hawamdeh, S. & **Chang, H.-C.** (eds.). (2018). *Analytics and Knowledge Management*, CRC Press, Taylor & Francis Group.

Book Chapters:

Hajian, A., **Chang, H.-C.** (2023). A Blockchain-Based Smart Grid to Build Resilience Through Zero-Trust Cybersecurity. In: Fathi, M., Zio, E., Pardalos, P.M. (eds) *Handbook of Smart Energy Systems*. Springer, Cham.

Chang, H.-C., Jim, C. & Hawamdeh, S. (2020). Bridging the Cybersecurity Talent Gap: Cybersecurity Education in iSchools. In *Cybersecurity for Information Professionals: Concepts and Applications*, edited by **Chang, H.-C.** & Hawamdeh, S., CRC Press, Taylor & Francis Group.

Chang, H.-C. (2020). Mobile Cybersecurity: A Socio-Technical Perspective. In *Cybersecurity for Information Professionals: Concepts and Applications*, edited by **Chang, H.-C.** & Hawamdeh, S., CRC Press, Taylor & Francis Group.

Wang, C.-Y., Lin, Y. C., **Chang, H.-C.**, & Chou, S.T. (2020) Consumer Sentiment in Tweets and Coupon Information-Sharing Behavior: An Initial Exploration, *Information Diffusion Management and Knowledge Sharing: Breakthroughs in Research and Practice*, IGI Global, p. 823-842.

Chong, M. & **Chang, H.-C.** (2018). Social Media Analytics. In *Analytics and Knowledge Management*, edited by Hawamdeh, S. & **Chang, H.-C.**, CRC Press, Taylor & Francis Group, p. 195~219.

Trade Publication:

Chang, H.-C. & Lund, B. D. (2025, January 27) Bringing AI and Blockchain Synergy into Cyber Threat Intelligence Cycle. *Information Matters*, Vol. 5, Issue 1. <https://informationmatters.org/2025/01/bringing-ai-and-blockchain-synergy-into-cyber-threat-intelligence-cycle/>

Workshop Paper or Invited Contribution:

Chang, H.-C., Wang, C.-Y. & Zavalina, O. (2019). Topic Maps in the Era of Big Data: A Systematic Mapping Review, *Workshop on Organizing Data, Information, and Knowledge in Big Data Environments, ACM/IEEE Joint Conference on Digital Libraries*, Urbana-Champaign, Illinois, June 2~6, 2019.

Jim, C. K., & **Chang, H.-C.** (2019). Beyond Social Media Safety: What Teens Need to Know About Online Privacy and Security Issues. *Voice of Youth Advocates*, (41) 6, 22-24.

Chang, H.-C. (2018). A Cybersecurity Education Model for the Public: Learn-Think-Change, *New Approaches to Cybersecurity Education (NACE) Workshop*, New Orleans, June 9~10, 2018.

Squires, S. & **Chang, H.-C.** & Takabi, H. & Johnson, J. (2016). Holistic Approach to Cyber-Security Awareness, Beliefs and Behaviors: From Individual to System Level, *Computing Community Consortium (CCC) Visioning Workshop on Grand Challenges in Sociotechnical Cybersecurity*, College Park, Maryland, Dec. 12~13, 2016.

Squires, S. & **Chang, H.-C.** (2016). People, the Weak Link in Cyber-security: A Mixed Method Approach, *UNT College of Engineering Research Discovery Workshop*, Denton, Texas, August 22, 2016.

Conference Panels/ Posters/ Presentations:

Hajian, A., Prybutok, V., Koh, C., **Chang, H.-C.**, Prybutok, G. (2023). A Text Mining Approach in Blockchain-Based Information Sharing Systems: Machine Learning Algorithms in Theory Development. *The 54th Annual Conference of the Decision Sciences Institute*, Atlanta, GA, November 18~20, 2023.

Hajian, A., **Chang, H.-C.**, Prybutok, V., Chen. J., (2021) Privacy and Trust Concerns in Social Media Applications. *The 52nd Annual Conference of the Decision Sciences Institute*, November 19, 2021.

Hajian, A., Prybutok, V., **Chang, H.-C.**, (2020) How do Morning and Friendly Advertisements relate to Purchase Intention? *The 51st Annual Conference of the Decision Sciences Institute*, November 20~23, 2020.

Alemneh, D., Hawamdeh, S., **Chang, H.-C.**, Rorissa, A., Assefa, S. & Helge, K. (2020) Open Access in the Age of a Pandemic, Panel, *American Society for Information Science and Technology (ASIS&T 2020) Annual Meeting*, October 23-29, 2020.

Alemneh, D., **Chang, H.-C.**, Hawamdeh, S., Rorissa, A. & Assefa, S. (2019) Cybersecurity Challenges in the Era of Open Access and BIG Data: Issues and Considerations, Panel, *Special Interest Group - Social Informatics (SIG-SI) Research Symposium (Practical Social Informatics: Collaboration Across Fields, Sectors, and Borders)*, *American Society for Information Science and Technology (ASIS&T 2019) Annual Meeting*, Melbourne, Australia, October 19-23, 2019.

Khan, H., **Chang, H.-C.** & Kim, J. (2018). Unfolding Research Data Services: An Information Architecture Perspective. *Proceedings of the 18th ACM/IEEE Joint Conference on Digital Libraries*, Fort Worth, Texas, USA, June 3-7, 2018 (JCDL'18). DOI: 10.1145/3197026.3203887

Zimmerman, T. & **Chang, H.-C.** (2018). Getting Smarter: Definition, Scope, and Implications of Smart Libraries. *Proceedings of the 18th ACM/IEEE Joint Conference on Digital Libraries*, Fort Worth, TX, USA, June 3-7, 2018 (JCDL'18). DOI: 10.1145/3197026.3203906

Chang, H.-C. (2017). Understanding Cybersecurity Behavior of Security-Conscious Professionals: An

Ethnographic Decision Tree Model, "Paper-a-thon" Research Paper Hackathon, *International Conference on Information Systems (ICIS) 2017*, Seoul, South Korea, December 9-13, 2017.

Zhang, Y. & **Chang, H.-C.** (2017) Decomposing and Visualizing the Twitter Data Stream with Healthcare Hashtags: An Information Theoretical Perspective, *American Society for Information Science and Technology (ASIS&T 2017) Annual Meeting*, Washington D.C., October 27 ~ November 1, 2017.

Awojobi, B. & **Chang, H.-C.** (2017) Security and Privacy Issues with Smart Thermostats: A First Look, *The 13th International Conference on Knowledge Management (ICKM 2017)*, Dallas/Fort Worth, Texas, October 24~26, 2017.

Awojobi, A. & **Chang, H.-C.** (2017). Privacy and Security Research in Information Science: A First Look, *Multidisciplinary Information Research Symposium*, Denton, April 13, 2017.

Chang, H.-C. & Hawamdeh, S. (2016). Envisioning the Role of Data Analytics in Knowledge Management, *The 12th International Conference on Knowledge Management (ICKM 2016)*, Vienna, October 10~11, 2016.

Chang, H.-C. (2016). Analytics and Knowledge Management: A Concept Mapping Approach, Panel presentation at the *12th International Conference on Knowledge Management (ICKM 2016)*, Vienna, Oct. 10~11, 2016.

Wang, X. & **Chang, H.-C.** & Yang, J. & Chen, J. (2016). Users' Interests and Behavior Patterns of Using Chinese Collections: A Large-Scale Log Analysis, *2016 International Conference on Integrated Development of Digital Publishing and Digital Libraries*, Hangzhou, China, July 10~12, 2016.

Wang, C.-Y. & **Chang, H.-C.** (2015). Visualization of the Evolving Internet of things (IoT) Knowledge Landscape: A Scientometric Approach. *The International Multi-Conference on Engineering and Technology Innovation 2015 (IMETI 2015)*, Kaohsiung, Taiwan, Oct. 30 ~ Nov. 3, 2015.

Chang, H. -C. and Upchurch, E. (2015). Big Data Visualization as Storytelling: A Means-End Chain Approach" *The 2015 Knowledge & Information Professional Association (KIPA) Annual Conference*, Denton, Texas, March 6-7, 2015.

Chang, H. -C. and Wang, C.Y. (2013). The Knowledge Map of National Enterprise Architecture: Decision-Making of Cloud Service Strategy, *The 2013 International Conference on Business and Information (BAI2013)*, Bali, Indonesia, July 7-9, 2013.

Chang, H.-C. and Iyer, H. (2010). Metadata Management Meets Folksonomy: A Case Study of Common Tag and Twitter Hashtags, *Association for Library and Information Science Education (ALISE 2010) Conference*, Work-in-Progress Poster Session, Boston, MA, January 12-15, 2010.

Chang, H.-C. and Wang, C.Y., (2009). Social Search: A Good Compass for Online Way-finding? *The 10th Annual Information Architecture Summit (IA Summit 2009)*, Poster Session, Peabody Memphis,

Memphis, TN, March 20-22, 2009.

Chang, H.-C. and Anderson, D. L. (2008). The Affinity between Online Information-Seeking Behavior and Emotion: A Pilot Focus Group Study of Information Studies Master's Students at the University at Albany, *New Trends in Informatics Research (NTIR) Conference*, the University at Albany, State University of New York, May 2, 2008.

Chang, H.-C. (2007). E-Government and the Surge of Web 2.0, *New Trends in Informatics Research (NTIR) Conference*, the University at Albany, State University of New York, April, 2007.

EDITORIAL BOARD of JOURNALS

- Journal of Information & Knowledge Management
- The Electronic Library (2016~2022)

REVIEWER of JOURNALS

- BMC Psychiatry
- Discover Artificial Intelligence
- Educational Technology & Society
- IEEE Access
- IEEE Security & Privacy
- IFLA Journal
- Information Discovery and Delivery
- International Journal of Knowledge and Systems Science
- International Journal of Knowledge and Learning
- Journal of Data and Information Science
- Journal of Knowledge Management
- Journal of Information & Knowledge Management
- Journal of Big Data
- Journal of Information Science
- Journal of the Association for Information Science and Technology
- Transactions on Management Information Systems
- The Electronic Library
- Scientometrics
- PLOS ONE

REVIEWER of CONFERENCES

- Association for Information Science & Technology (ASIS&T)
- International Conference on Information Systems (ICIS)
- Americas' Conference on Information Systems (AMCIS)
- International Conference on Knowledge Management (ICKM)
- Grace Hopper Celebration (GHC) – Data Science and Cybersecurity Tracks

- Multi-Disciplinary Information Research Symposium (MIRS)

GRANTS

Funded:

- Co-PI, DHS Scientific Leadership Award Grant, 2023-2025, Project: Minority Cyber-CREWS: Minority Community Cybersecurity Research, Educational Engagement, Workforce Development, and Security Best Practices, Department of Homeland Security (DHS) (\$999,688). PI: Dr. Gahangir Hossain; Co-PIs: Drs. Brady Lund, Tozammel Hossain, Suliman Hawamdeh.
- PI, Micro Mentoring Grant, 2021-2022, Project: Understanding Cybersecurity Governance and Data Breach Incidents through the Lens of Data Analytics, Office for Faculty Success, University of North Texas (\$1,479).
- PI, Faculty Summer Research Grant 2019, Department Information Science, University of North Texas, Project: Navigating the Role of Mobile Technologies in Shaping Information Behavior (\$8,000).
- PI, Research Seed Grant 2018-2019, Office of Research and Innovation, University of North Texas, Project: Making Sense of Internet of Things (IoT) Data Breach with a Topic Map (\$6,310).
- PI, Research Seed Grants 2017-2018, College of Information, University of North Texas, Project: Privacy and Cybersecurity Decision-Making Challenges of the Consumer Internet of Things: The Smart Home and Wearable Scenarios (\$5,000).
- PI, Faculty Summer Research Grant 2017, Department Information Science, University of North Texas, Project: Privacy and Cybersecurity Decision-Making Challenges of the Internet of Things (\$8,000).
- Co-PI, UNT Library Mini Grant 2016, Project: Using Hashtags to Assess the Extent and Impact of Shared Beliefs on Perceived Cyber-Threats among Communities of Practice (\$500), Co-PI: Dr. Susan Squires.
- PI, Faculty Summer Research Grant 2015, Department of Library and Information Sciences, University of North Texas, Project: Cyber-Security Information Sharing in Social Media Networks of Practice: Hashtag Network Analytics with Digital Trace Data (\$5,000).

Proposals under review:

- PI, Amazon Research Awards, 2025, Human-AI Collaborations in the Agentic AI Loop: Aligning User Experience with AI Guardrails and Zero Trust Cybersecurity (\$69,999), Co-PI: Dr. Xin Wang.
- Co-PI, NSF SaTC 2.0: RES, 2025, Securing Higher Education for the Post-Quantum Future: Strategic Readiness in Large Scale Institutional Cybersecurity (\$500,758), PI: Dr. Brady Lund.

Proposals submitted but not funded:

- Co-PI, NSF SFS-RENEW, 2020, Advancing Learning and Leadership Through an Integrated Multidisciplinary Doctoral Program in Cybersecurity (\$1,122,846), PI: Ram Dantu, Co-PIs: Kirill Morozov, Brooke Nodeland, and Victor Prybutok.

- Co-PI, NSF2026, Conference Proposal, 2020, Nurturing Scientific Talent by Promoting Data Computational Literacy Across Disciplines and Building Knowledge Communities (\$85,530), PI: Suliman Hawamdeh.
- Co-PI, NSF CyberTraining Pilot, 2020, Smart Cities Cybersecurity Threats and The Challenges of Making Data Available (\$293,438), PI: Suliman Hawamdeh, Co-PIs: Daniel Alemneh and Junhua Ding.
- Co-PI, NSF SFS-RENEW, 2019, Advancing Learning and Leadership Through an Integrated Multidisciplinary Doctoral Program in Cybersecurity (\$3,456,374), PI: Ram Dantu, Co-PIs: Kirill Morozov, Brooke Nodeland, and Victor Prybutok.
- Co-PI, IMLS, 2019, Pre-proposal: LIS Data Science Capacity Building: Harnessing the Power of Smart City Data, PI: Suliman Hawamdeh, Co-PIs: Daniel Alemneh and Junhua Ding.
- PI, NSF CAREER Proposal, 2019, CAREER: Mobile Data Breaches: Situational Analysis Mapping and Data Storytelling (\$423,412).
- PI, Spencer Foundation, 2019, Youth Mobile Security Behavior in the Interconnected World: Identifying Risk Factors and Designing Preventive Measures for Teens (\$49,957).
- PI, Facebook Research, 2019, Teens Mobile Safety Experience and Visual Nudges as Preventive Measures (\$49,977).
- Co-PI, NSF HDR DSC, 2019, Building Capacity and Community Engagement through Harnessing the Power of Smart City Data (\$971,635), PI: Suliman Hawamdeh, Co-PIs: Daniel Alemneh and Junhua Ding.
- PI, NSF EARly-concept Grants for Exploratory Research (EAGER), 2018, Understanding the Socio-Technical Dimension of Cybersecurity Data Breaches using Computational and Situational Analysis, Co-PIs: Susan Squires and Suliman Hawamdeh.
- PI, William T. Grant Foundation, William T. Grant Scholars, 2018, Youth Privacy and Cybersecurity Behavior in the Interconnected World: Enhancing Teens' Perceptions of Smart Wearables (\$350,000).
- PI, NSF CAREER Proposal, 2017, Cyber-security Literacy and Behavioral Change in Consumer Internet of Things (IoT) (\$400,000).
- PI, Institute of Museum and Library Services (IMLS) Early Career Development, 2017, Privacy and Cybersecurity Decision Making Challenges: Topic Mapping for the Internet of Things.
- PI, IMLS Early Career Development, 2016, Human-Information Interaction of Timely Hashtags in Social Media-Enabled Electronic Networks of Practice (eNoPs): Intertwined Hashtag Networks.
- Co-PI, IMLS, 2016, Bridging Data Skills Gaps through Continuing Education, PI: Jeonghyun Kim, Co-PI: Suliman Hawamdeh.
- Co-PI, NSF SaTC (Secure and Trustworthy Cyberspace), 2015, Impact of Community of Practice's Shared Mental Models on Member Beliefs and Practices to Perceived Cyber-Threats, PI: Susan Squires, Co-PIs: Dan Kim and Hassan Takabi.
- Co-PI, IMLS, 2015, Program of Study in Knowledge Management and Data Analytics, PI: Suliman Hawamdeh.
- Co-PI, IMLS, 2014, Certificate Program in Knowledge Management for Libraries, PI: Suliman Hawamdeh, Co-PI: Kathryn Masten-Cain.
- PI, Incentives for Global Research Opportunities (I-GRO), 2014, Selecting Cloud Migration Strategy

- with Enterprise Architecture: A Benefits-Opportunities-Costs-Risks (BOCR) Analysis.
- PI, Association for Library and Information Science Education (ALISE), 2014, Mapping the Social Media Knowledge Landscape: Integrating Co-Word Analysis with Association Rule Mining and Text Visualization.

AWARDS

- **Linda Schamber Best Paper Award (First place)** at the Multidisciplinary Information Research Symposium (MIRS) 2025
 - The awarded paper “Smart Devices, Smarter Cybersecurity: Leveraging Zero Trust and Artificial Intelligent for IoT Networks” was co-authored with Jennifer Lyles, IIS Ph.D. Student.
- **Best Paper Award** at the International Conference on Knowledge Management (ICKM) 2017.
 - The awarded paper “Decomposing and Visualizing the Twitter Data Stream with Healthcare Hashtags: An Information Theoretical Perspective” was co-authored with Yuan Zhang, IIS Ph.D. Student.
- **The Osaka Prefecture University President Award** at the International Conference on Knowledge Management (ICKM) 2015.
 - The awarded paper: “Information Security and Cyber Security Research: A Scientometric Analysis and Knowledge Mapping Approach.”
- **Student Paper Contest Award**, American Society for Information Science and Technology (ASIS&T) SIG-MET (Metric) 2011.
 - The awarded paper: “Modeling Twitter Archiving System Diffusion: A Multinomial Logistic Regression Approach.”
- **Graduate Assistantship**, University at Albany, State University of New York, 2006 ~ 2009.

SERVICES to UNIVERSITY/COLLEGE/DEPARTMENT/PROFESSIONAL COMMUNITIES

University:

- Being selected a Faculty Leadership Fellow (2025~2026).
- Being invited as a contributor of the “Expert Take” section on “A Critical Eye for Info” in the fall issue of the North Texan (UNT’s alumni magazine), 2020. <https://northtexan.unt.edu/issues/2020-fall/critical-eye-info>
- Member, Center for Learning Experimentation, Application, and Research (CLEAR), Preliminary Investigation of Cloud-based Learning Management Systems (LMS) Committee, 2016.
- Consultant, UNT Office of Sustainability’s Connect³ project (led by Dr. Brian Calfano) regarding social media data analysis and mapping, 2015.

College:

- Member, The Personnel Affairs Committee (PAC) & Reappointment, Promotion, and Tenure Committee (RPTC), College of Information, 2023~present.
- Member, Ad-hoc COI By-Laws Committee, College of Information, 2020.

- Member, Supplemental Travel Funds Committee, College of Information, 2019~present.
- Member, Task Force for Technology Support Group, College of Information, 2016.

Department:

- Faculty Advisor, Information Systems Program of Study, Department of Information Science, 2019~present.
- (Elected) Member, Committee on Committees, Department of Information Science, 2025~Present, 2018~2020, 2015~2016.
- Co-Chair, Personnel Affairs Committee, Department of Information Science, 2024.
- (Elected) Member, Personnel Affairs Committee, Department of Information Science, 2025, 2020~2022.
- Member, Curriculum Committee, Department of Information Science, 2020~2022.
- Co-Chair, Curriculum Committee, Department of Information Science, 2018~2020.
- (Elected) Member, Executive Committee, Department of Information Science, 2019~2020, 2015~2017.
- Member, End of Program (EOP) Committee, Department of Information Science, 2016~2018.
- Chair, Ad-Hoc Committee for MS program in Data Analytics and KM, 2016.
- Member, Student Affairs Committee, Department of Information Science, 2015~2016.

Professional Communities:

- Participant Expert, *Developing Strategies to Increase Capacity in AI Education: Results of the NSF LEVEL UP AI Roundtable Discussions report* (2025)
- iSchools Doctoral Dissertation Award 2025 Committee
- iSchools Environmental Analysis Working group
- Program Committee, *The 19th International Conference on Knowledge Management (ICKM 2024)*
- Program Committee & Paper Reviewer, *The 17th International Conference on Knowledge Management (ICKM 2022)*
- Member, ProQuest Doctoral Dissertation Award Committee, *American Society for Information Science and Technology (ASIS&T 2021) Annual Meeting*, October 29-November 2, 2021.
- Paper Reviewer, *American Society for Information Science and Technology (ASIS&T 2021) Annual Meeting*, October 29-November 2, 2021.
- Program Committee & Track Chair - KM in Information Science & Organization & Moderator of Two Sessions - Health Related Topics & Innovative Governance, *The 16th International Conference on Knowledge Management (ICKM 2020)*, Durham, NC, December 3-5, 2020.
- Paper Reviewer, *American Society for Information Science and Technology (ASIS&T 2020) Annual Meeting*, October 23-29, 2020.
- Paper Reviewer, *International Conference on Information Systems (ICIS 2020)*, December 13-16, 2020.
- Member, ProQuest Doctoral Dissertation Award Committee, *American Society for Information Science and Technology (ASIS&T 2020) Annual Meeting*, October 23-29, 2020.
- Section Chair: Information Integration / Linked Data, *American Society for Information Science and*

Technology (ASIS&T 2019) Annual Meeting, Melbourne, Australia, October 19-23, 2019.

- Program Committee & Section Chair: KM and Social Media Analytics, *The 13th International Conference on Knowledge Management (ICKM 2017)*, Dallas/Fort Worth, Texas, October 24~26, 2017.

PROFESSIONAL AFFILIATIONS

- American Society for Information Science and Technology (ASIS&T)
- Anita Borg Institute for Women and Technology
- Association for Library and Information Science Education (ALISE)
- Association for Computing Machinery (ACM)
- Association for Information Systems (AIS)
- Certificate of Cloud Security Knowledge (CCSK) certified
- Cloud Security Alliance
- Critical Infrastructure Cyber Community
- Cyber Security and Information Systems Information Analysis Center
- Cybersecurity Policy Fellow, New America (2018~2020)
- Data Science Association
- R User Groups
- Women in CyberSecurity (WiCyS)

Last updated 1/22/2026