



## **CURRICULUM VITAE**

### **December 2025**

#### **Manar Alsaid, PhD**

Assistant Professor

Department of Computer Science & Information Systems, College of Science & Engineering,  
East Texas A&M University

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Office 218

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#### **EDUCATION**

- BSc (Computer Science), Al-Balqa Applied University, Jordan, 2007-2010
- Ph.D. (Information Studies with a Concentration in Data Science) University North Texas, 2018- 2024

#### **CERTIFICATIONS**

- Demystifying AI, University North Texas, November 2024
- How You Can Use AI, University North Texas, November 2024
- McKinsey certificate of completion and forward digital badge

#### **WORK EXPERIENCE**

- Assistant Professor, Department of Computer Science & Information Systems, Texas A&M University-Commerce. From August 19- Now
- Instructor, the Data Science Camp includes the Gen Data Leadership camp and Tech Explorers. Data Sciences, University of North Texas in Frisco. From Jan 1- July 30, 2024)
- Teaching Fellow, Department of Information Science, University of North Texas. From June 2022 – August 17, 2024.
- Teaching Assistant, Department of Information Science, University of North Texas. From January 2019- 2022.
- Graduate Student Assistant (Administrative assistant). Department of Information Science, University of North Texas. From October 2020 – December 2020.
- Research Support. Data Innovation Lab. Department of Information Science, University of North Texas. From 2021 – August, 2024.
- Assistant Editor for Journal of Information & Knowledge Management from March 2022 – Now. (<https://www.worldscientific.com/page/jikm/editorial-board> )

- Computer lab supervisor and technician Assistant at Hajawi for Engineering Technology College, Yarmouk University, Irbid, Jordan (2009-2010)
- Alsharq Business Management-INTRN, Irbid, Jordan (2008-2009)

### **AWARDS & SCHOLARSHIP**

- G2T Global Academic Excellence Award on 27 November 2025 at the Adam Park Hotel, Marrakech, Morocco ( <https://glob2t.com/winners>)
- Outstanding Online Presenter Award online session AI -IS IEEE International Conference on artificial intelligence for sustainability innovations from 26 to 28th August 2025 at KL, Malaysia.
- The University of North Texas, Toulouse Graduate School Summer 2024 Award
- The College of Information (COI) at the University of North Texas, as part of COI special celebration for the 15th anniversary. Poster as a 3rd Place selection to be displayed in the anniversary event on November 10, 2023
- The University of North Texas, Tuition Benefit Program (TBP) Award Agreement for Fall 2023 and Spring 2024
- The University of North Texas, Tuition Benefit Program (TBP) Award Agreement for Fall 2022 and Spring 2023
- The University of North Texas, Department of Information Science Travel Grant, Fall 2023
- The University of North Texas, Graduate School Travel Grant, Fall 2023
- The University of North Texas, Graduate School Travel Grant, Spring 2022
- The University of North Texas, Department of Information Science Travel Grant, Spring 2022
- The University of North Texas, COVID-19 Student Success Award (Spring 2022, Summer 2021, Fall 2021)
- The University of North Texas, Toulouse Graduate School Summer 2022 Award
- COI/LIS Virginia Clarke Scholarship Fall 2022 and Spring 2023
- The University of North Texas, Tuition Benefit Program (TBP) Award Agreement for Fall 2020 and Spring 2021
- COI/LIS General Scholarship
- Agnes LC Greene Memorial Scholarship
- The Dewey E. Carroll Graduate Fellowship and the Mark E. Rorvig Endowed Graduate Fellowship 2020

### **RESEARCH**

#### **Research Interest**

My research agenda and philosophy are centered around issues of great importance to the fields of information science and technology. It is based on the belief that research is an essential tool for critical thinking and informs teaching and practice. The integration of technology into different aspects of our lives, from social to economic to health, has changed the way we interact, converse, and share information and knowledge. The following are some of the areas that characterize my research interest:

- Data Analytics, Natural Language Processing, Content Analysis, Big Data Processing

- Social Media Analytics
- Data Curation, Process and Transfer
- Health Informatics
- Human Values and Ethical Issues
- AI technology and algorithm
- AI and Social Problems in Sustainability, Health, Environment and Human Health and Wellness, Social Justice
- Cybersecurity and Ethical Issues
- Organizational Culture and Diversity

## **Research Projects and Grant**

- Roadmap For Co-Designing Digital Collections For Non-Academic Users. the IMLS National Leadership Grants for Libraries (NLG-L) program. The requests amount \$678,919. (Submitted, considered for the final review, Unfortunate, the department of IMLS has been fired by the US Administrator of 2025)
- Academic Integrity and the Role of libraries in Promoting Civic Engagement and Ethical Use of AI. IMLS Laura Bush 21st Century Librarian Program. 2023-2024. Requested amount \$350,000. (Submitted, Not Selected)
- In the Dissertation, developed and used machine learning algorithms such as Random Forest, SVM, and Naive Bayes to identify and quantify social noise in social media..
- Implicit Bias and Cultural Competence: A Framework for Enhancing Tacit Knowledge
- The Impact of Social Noise on social media and the Original Intended Message: BLM as a Case Study
- COVID-19: Mask Misinformation and Social Noise
- The Impact of Misinformation and Social Noise on Masking: Data Analysis Using Twitter Masking Hashtags
- Factors Influencing COVID-19 Vaccinations: Data Analysis of Twitter's Related Hashtags
- Data Curation and Digital Preservation for Smart Cities and Libraries
- Social Noise and People's Perception of Global Warming During Critical Environmental Events
- Social Noise and its Impact on the Health of The Information Ecosystem. Examining the Relationship between Social Noise and Social Entropy
- Data Curation and Digital Preservation for smart cities and libraries. IMLS Laura Bush 21st Century Librarian Program.2022-2023. (Submitted Not selected)
- Archivists in the Age of Misinformation: The Challenges of Preserving Digital Information and Providing Long Term Access. F. Gerald Ham and Elsie Ham Scholarship. 2022 (Submitted Not selected)
- The Association for Library and Information Science Education (ALISE) Diversity Travel Award to submitted to the ALISE 2022 Annual Conference (Not selected)

## **TEACHING**

- CSCI 597 Coursera Specialization Project, Spring 2024 (Assistant Professor)
- CSCI 233 Application Program Development, Spring 2026 (Assistant Professor)

- CSCI 352 Digital Forensics, Spring 2026 (Assistant Professor)
- CSCI 340 Database, Spring 2026 (Assistant Professor)
- CSCI 563 Information Security, Fall 2025 (Assistant Professor)
- CSCI 340 Database, Fall 2025 (Assistant Professor)
- CSCI 595 Research Literature and Techniques Fall 2025 (Assistant Professor)
- CSCI 597 Coursera Specialization Project, Spring 2024 (Assistant Professor)
- CSCI 526 Database Systems, Spring 2024 (Assistant Professor)
- CSCI 352 Digital Forensics, Spring 2024 (Assistant Professor)
- CSCI 303 Technical Communication for Computing Professionals, In Fall 2024 (Assistant Professor)
- CSCI 340 Database, In Fall 2024 (Assistant Professor)
- CSCI 352 Digital Forensics, In Fall 2024 (Assistant Professor)
- INFO 4230 Records Management Operations, in the Spring 2024 (Teaching Fellow)
- INFO 6000 Seminar in Information Science, in the Fall of 2023 both the Denton and Frisco campuses (Teaching Fellow and Teaching Assistant - I delivered and taught the data science theoretical and technical)
- INFO 5503 Knowledge Management Processes and Practices, in the Fall of 2023 (Teaching Fellow)
- INFO 5503 Knowledge Management Processes and Practices, in Summer 2023 (Teaching Fellow)
- INFO 5295 Preservation in Summer 2023 (Teaching Assistant)
- INFO 5230 Records Management & Document Management, in Spring 2023 (Teaching Fellow)
- INFO 4230 Records Management & Document Management, Spring 2023 (Teaching Fellow)
- INFO 5000 Information and Knowledge Professions in Summer 2023 (Teaching Assistant)
- INFO 6000 Seminar in Information Science, Denton and Frisco campuses, Fall 2022 (Teaching Assistant).
- INFO 5503 Knowledge Management Processes and Practices in Fall 2022 (Teaching Assistant)
- INFO5295 Presentation, Spring 2022 (Teaching Assistant).
- INFO 5500 Foundational Principles in Knowledge Management, Spring 2022 (Teaching Assistant).
- INFO 6000 Seminar in Information Science and for the Denton and Frisco campuses, Fall 2021 (Teaching Assistant).
- INFO 5503 Knowledge Management Processes and Practices, Fall 2021(Teaching Assistant).
- INFO 4745 Information Architecture, in Summer 2021 (Teaching Assistant).
- INFO 5745 Information Architecture, Summer 2021 (Teaching Assistant).
- INFO 5000 Information and Knowledge Professions, in Spring 2021 (Teaching Assistant).

- Worked with the Center for Learning Experimentation, Application and Research (CLEAR) on developing and revising the content for INFO 4745 and INFO 5745 Information Architecture Spring 2021
- Developed a new course, INFO 4100 Information Science, in Spring 2021
- INFO 5295 Preservation, in Fall 2020 (Teaching Assistant).
- Fall 2020, helped with administrative tasks for the Chair of the Department of Information Science at the University of North Texas as a Graduate Service Assistant (GSA)
- INFO 5200 Information Organization, in Spring 2020 (Student Assistant).

## **SERVICE AND COMMUNITY WORK**

### **Editorial and Reviewing Work**

- Associate editor, the Journal of Information and knowledge management (JIKM) from 2025-now.
- Assistant editor for the Journal of Information and knowledge management (JIKM) from 2022-2025. Serving as an assistant editor involved coordinating paper submissions, assisting editor in Chief and associate editor with reviewing and corresponding with authors.
- Served as a reviewer for Journals and conferences, including the Journal of Information Science, IEEE access, ACM, IEEE Explore , PMC, the Journal of Information and Knowledge Management (JIKM), The International Conference on Knowledge Management (ICKM), and so on.

### **Conferences and Seminars**

- Attend Jindal School Launches Certificate to Address Need for Sustainability Education in Aviation and Travel. Feb 6 & 7, 2025. At the University of Texas at Dallas.  
<https://jindal.utdallas.edu/news/jindal-school-launches-certificate-to-address-need-for-sustainability-education-in-aviation-and-travel/>
- Attended and presented papers and posters at AI-SI in IEEE in 2025, ASIS&T 2024, ICKM in 2025, 2024 , 2022,2020. ALISE in 2022, 2023 and 2024, and MIRS in 2021 and 2022
- International Grand Award Judge, serving as a Grand Award Judge at International Science and Engineering Fair (ISEF) 2023. Regeneron ISEF 2023, an in-person event for finalists and judges in Dallas, TX, at the Kay Bailey Hutchison Convention Center from May 13-19, 2023, in the Social Science category.

### **Service to The Department and University**

- Thesis Adviser and Committee, September 2024-Now
- Develop the Master in cybersecurity new programs proposal , Sept 1, 2025- now
- Develop the Masters in Information Science new programs proposal, April 1, 2025-now.
- Develop the AI degree programs, February 2025 – Dec 2025

- Invited Lecture at The University of North Texas (UNT ) PhD class on data science. INFO 6000, Fall 2024.
- Guest speaker at Planning and Implementing a Digitization Project, project collaboration between the University of Amsterdam and the University of North Texas
- Graduate Admissions and Scholarships Committee, August 2024- Now
- Ambassador at Dallas Location (at 8750 North Central Expressway, opposite NorthPark Center) August- Now
- Invited a guess speaker, Dr. Angel Durr. Fall 2024
- AI Algorithm and Machen Learning workshops Spring 2024
- The College of Information (COI) special celebration for the 15th anniversary, Nov 2023
- AI Algorithm and Machen Learning workshops Fall 2023
- Health Informatics Lecture Series: Developing and Deploying Large Language Models in Healthcare Fall 2023 ( <https://ci.unt.edu/health-informatics-lecture-series> )
- Discovery Series: AI Support Tools for Teaching, Learning, and Research, Fall 2023 ( <https://ci.unt.edu/discovery-series> )
- CODE (Career Opportunities Direction Exploration) Series aim to stimulate the exchange of ideas at the intersection of information science, linguistics, and learning technologies (<https://ci.unt.edu/discovery-series> )
- The Department of Information hiring process
- The Department of Information Science Research Seminar (Brown Bag) in 2021, 2022,2023
- Conference at the University of North Texas (MIRS) 2021 and 2022
- Participated in the Department of Information Science Faculty hiring process.
- Basics of Finding Funding for Graduate Students workshops, Fall 2023
- Python language workshop Spring 2020
- R- language Spring 2020

### **Community Work**

- Volunteering consultation for Impactup Company, KSA. From January – March 2025
- Volunteering consultation for Greater Amman Municipality for a project 100 Flexible Cities, Amman, Jordan. From May - October 2025
- Volunteering in the athletic teams at McMath Middle School, Denton, TX, assists coaches and athletes on how young athletes seek accurate health information.
- Parent-Teacher Association (PTA) at Denton ISD
- Voluntarily worked as family support at Cook Children's Hospital Fort Worth, Texas

### **Professional Association Membership**

- Women Elevate Mentorship
- The Institute of Electrical and Electronics Engineers (IEEE)
- The Association for Information Science and Technology (ASIS&T)
- Association for Computing Machinery (ACM)
- The Arab American Association of Engineers and Architects (AAAEA)
- The International Council on Knowledge Management (ICKM)
- The Association for Library and Information Science Education (ALISE)
- The 2024 ALISE Emerging Scholars Program

## **SKILLS & COMPETENCIES**

- Editorial and reviewing work
- Analytical thinking skills
- Data modeling, Big data analytics, ML
- Programming languages: Python, Java, C++, HTML, PHP
- MySQL, Scheme, and MatLab Software: Microsoft Office
- Communications And Network
- Operating Systems: Windows (95, 98, 2000, XP, Vista),
- Mac OS, Linux
- Information Science Software: LIBIB, Mined Map, Literature Maps Software, And Nvivo, Mining, VOSviewer, RapidMine
- Predictive Modeling Techniques: Decision Trees Analytical Tools: SAS, IBM, SPSS, Drupal 8, Tableau
- Computer Skills Education
- Group And Individual Instruction

## **PUBLICATIONS AND PRESENTATIONS**

### **Refereed Journal Articles**

- **Alsaid** , M., Ballem, S., Rostami, M. (2025). Social Noise Tweets Detection and Classification Employing ML and DL and Using Predefined Constructs. IEEE Access. ( accepted)
- Mohammad, Y., **Alsaid**, M., Hossain, G. (2025). Future Trends in Cybersecurity: AMeta-Review. *Tenolchogy, Education, Management, Informatics*. (Accepted)
- **Alsaid**, M. (2025). Managing Social Noise and Reducing the Impact of Misinformation on Business Practices. Book Series: Artificial Intelligence in Organizations: Transformative Technologies, Applications, and Impacts. Artificial Intelligence in Organizations: Transformative Technologies, Applications, and Impacts. Volume 1. *World Scientific*. <https://www.worldscientific.com/series/aiottai>
- **Alsaid**, M. (2025). Using Machine Learning to Enhance the Quantification Of Social Noise On Social Media. Book Series: Artificial Intelligence in Organizations: Transformative Technologies, Applications, and Impacts. Navigating Inequities and Social Justice in the Age of Artificial Intelligence. Volume 2. *World Scientific*. Doi: <https://doi.org/10.1142/q0511> . URL : <https://www.worldscientific.com/worldscibooks/10.1142/q0511?srsId=AfmBOoplVN7mCeVoY55mhJrXZ88MCOXPI-h-TqOvPZpljR7nAuK36mN#t=aboutBook>
- Pampapura, N. M., **Alsiad**, M. and Hawamdeh, S. (2023). Social Noise on Social Media and Users Perception of Global Warming. *Journal of Information & Knowledge Management*. Vol. 22, No. 4. DOI: 10.1142/S0219649223500508
- **Alsaid**, M., & Madali, N. P. (2022). Social Noise and the Impact of Misinformation on COVID-19 Preventive Measures: Comparative Data Analysis Using Twitter Masking Hashtags. *Journal of Information & Knowledge Management*, 2240007.
- Pampapura Madali, N., **Alsaid**, M., & Hawamdeh, S. (2022). The impact of social noise on social media and the original intended message: BLM as a case study. *Journal of Information Science*, 01655515221077347



- **Alsaid, M., Hawamdeh, S., & Long, B. S. (2020).** Implicit Bias and Cultural Competence: A Framework for Enhancing Tacit Knowledge Transfer. *International Journal of Knowledge Engineering and Management*, 9(25), 6-30

### Conference's papers and Presentations

- Mohammad, Y., **Alsaid, M., Hossain, G. (2025).** AI in Operational Strategy: GPT & Perplexity Models in BofA's 2025 Branch Closure Case Study. *International Conference on Artificial Intelligence for Sustainable Innovation 2025, IEEE Explore. (accepted)*
- **Alsaid, M., Mohammad, Y., Ballem, S. (2025).** Automating Clinical Trial Enrollment: An AI Framework for Protocol Interpretation and Patient Matching. ICKM, Lisbon Portugal *(accepted)*.
- Mohammad, Y., **Alsaid, M., Hossain, G. (2025).** Beyond Banking: AI's Transformative Impact on Financial Stability and Systemic Challenges in the Financial Industry. ICKM, Lisbon Portugal *(accepted)*.
- Morloe, T., **Alsaid, M., Hawamdeh, S. (2025).** Green Intelligence: Leveraging Knowledge to Enhance Data Center Sustainability and Efficiency. ICKM, Lisbon Portugal *(accepted)*.
- Morloe, T., Yara, M., **Alsaid, M. (2025).** Strategic Integration of Knowledge Management Systems and Cloud Computing for Organizational Agility. ICKM, Lisbon Portugal *(accepted)*
- **Alsaid, M., Mohammad, Y, Durr., A. (2025).** Exploring AI Bias in Key Healthcare Literature: Systematic Review. *The AMIA 2026 Amplify Informatics Conference*, in May 18-21, 2026 , Denver, CO. (submitted)
- **Alsaid, M., Panguluri, S., Hawamdeh, S.(2024).** Combating Misinformation on Social Media Using Social Noise and Social Entropy as a Measure of Uncertainty. *Association for Information Science and Technology (ASIS&T), long paper*, Calgary, Alberta, Canada.
- **Alsaid, M. (2024, October).** The Relationship Between Misinformation And Social Noise And Their Impact On The Information Ecosystem. In *Proceedings of the ALISE Annual Conference*.
- Wan, Y., Kitzie, V., **Alsaid, M., Berkowitz, A. E., Herdiyanti, A., & Penrose, R. B. (2024, October).** The AI-empowered Researcher: Using AI-based Tools for Success in Ph. D. Programs. In *Proceedings of the ALISE Annual Conference*.
- **Alsaid, M. (2023),** Reducing Uncertainty Caused by Social Noise on Social Media Platform, *the ALISE 23 Annual Conference*. Milwaukee, Wisconsin. USA.
- Buchanan. S., **Alsaid, M, Hawamdeh, S. Harris, R. (2023).** Translating Practice to Positively Transform our Information Workforce. *the ALISE 23 Annual Conference*. Milwaukee, Wisconsin, USA
- **Alsaid, M., & Hawamdeh, S. (2022).** The Impact of Social Media on COVID-19 Vaccine Hesitancy and Acceptance: Data Analytic Approach. In *Proceedings of the ALISE Annual Conference*. In Pennsylvania, UAS. URL: <https://iopn.library.illinois.edu/journals/aliseacp/article/view/1098>



- Pampapura, N. M., **Alsiad**, M. and Hawamdeh, S. (2022). Social Media and People Perception of Global Warming During Critical Environmental Events: The Impact of Misinformation Through The Lens of Social Noise. *The 17th International Conference on Knowledge Management (ICKM)*, paper, in Germany, June 2022. <https://digital.library.unt.edu/ark:/67531/metadc2026753/m1/316/>
- **Alsiad**, M., Madali, N. P., Zimmerman, T., & Hawamdeh, S. M. (2020). COVID19: Mask misinformation and social noise. International Conference on Knowledge Management (ICKM) in North Carolina, 2020. <https://digital.library.unt.edu/ark:/67531/metadc1813454/>

## Research Presentations

- Hawamdeh, S. & **Alsiad**, M. (2023). The relationship between social noise and misinformation and their impact on the information ecosystem. *Presentation at The Department of Information Science Research Seminar. University of North Texas*. URL: <https://informationscience.unt.edu/researchmeetings>
- **Alsiad**, M. (2022). Archivists in the Age of Misinformation: The Challenges of Preserving Digital Information and Providing Long-Term Access. *(MIRS) conference at the University of North Texas*
- **Alsiad**, M. (2021). Doctors Information Seeking Behavior on social media and Their Ability to Identify Credibly and Reliable Medical Information. *(MIRS) conference at the University of North Texas*
- Pampapura, N. M., **Alsiad**, M. and Hawamdeh, S. (Oct 27, 2021). The Impact of Social Noise on Social Media and the Original Intended Message: BLM as a Case Study. *Presentation at The Department of Information Science Research Seminar. University of North Texas*. URL: <https://informationscience.unt.edu/research-meetings>
- **Alsiad**, M., Pampapura, N. M., and Hawamdeh, S. (Nov 4, 2021). COVID-19 Misinformation and Social Noise. *Presentation at the Department of Information Science Research Seminar. The University of North Texas*. URL: <https://informationscience.unt.edu/research-meetings>

## Conference Participation

- Attend and participate in the Microsoft event titled "Explore the Crucial Role of Generative AI in Knowledge Management," focusing on overcoming the hallucination effect in Large Language Models (LLMs) and implementing best practices for their use in enterprise organizations. Hosted by the Microsoft Technology Center, Texas, on March 5, 2024, from 9:00 am to 6:00 pm. URL: <https://kmslh.com/kms-lighthouse-microsoft-event-march-2024/>
- Attend and participate in 2023 Winter School: Introduction to Plotting Social Networks with R, (Dec 7 & 8, 2023). URL: <https://members.asist.org/events/Details/2023-winter-school-introduction-to-plotting-social-networks-with-r-971837?sourceTypeld=Website>
- Attend and participate in Building 2023 Winter School: Information Ethical Considerations of Generative AI: Research, Teaching & Learning URL: <https://members.asist.org/MIC/20782491/0/#/E/EventDetail/971810/868746>

- Attend and participate in Live Project for Software Developers "Build Your Own Digital Clock!-Sculpt Your Moments. ( Dec 14, 2023) URL: <https://www.linkedin.com/events/7138068390635569154/comments/>
- Attend and participate in Building Capacity of Academic Librarians in Understanding Quantitative Data, Data Quality Problems, and Evaluating Data Quality. This project was made possible in part by the Institute of Museum and Library Services [RE-252357-OLS-22]. ( January 26, 2023 ongoing) URL: <https://sites.google.com/view/imls2022-data-quality/home?authuser=0>
- Participated in a webinar on Data Quality Evaluation: Librarians' Role In Cultivating Data-Literate Citizens.July 27, 2023. [IMLS National Forum Webinar Session #7]. <https://sites.google.com/view/imls2022-data-quality/sessions/7-librarians-role-in-cultivating-data-literate-citizens?authuser=0>
- Participated in the webinar Data Quality Evaluation: Evolving Employer Expectations. Thursday, June 29, 2023. [IMLS National Forum Webinar Session #6]. <https://sites.google.com/view/imls2022-data-quality/sessions?authuser=0>

### Guest Speaker

- Al-Balqa' Applied University invited me be speaker at a national online seminar about the artificial intelligence for sustainability innovations. January 2025.
- The National Library of Indonesia's invited me be speaker about the role of data science in library and information science, Oct 2024.

### Professional Highlight

- Google Scholer, Citations 55, h-index 4, i10-index 2
- Saraya Jordain News, the Post name is From Ajloun to Texas: The Inspiring Journey of Dr. Manar Alsaïd ( <https://www.sarayanews.com/article/1044731> )
- Milestone where corporate achievements shine globally ( <https://milestonesglobal.com/manar-alsaid/> )

### Work in Progress

- Akbari, H., **Alsaïd** , M., 2025, Predicting the outcomes of depression therapies by time-frequency images and deep learning models, to be submitted to Computers in Biology and Medicine by September 20, 2025.
- Hybrid AI Models for Accurate and Transparent Fraud Detection. to be submitted to peer review journal by December 2025.
- Enhancing Intrusion Detection Systems in Multi-Cloud Environments: A Machine Learning-Based Approach to Mitigating AI-Generated Threats to be submitted to a peer review journal (IEEE Access or Communications of the ACM by December 2025).
- Enhance the prosomes AGI for ChatGPT and Gork to be submitted to a peer review journal.
- A paper on the Relationship Between Social Noise and Misinformation and Their Impact on The Health of The Information Ecosystem to be submitted to a peer review journal( Information Science ) .

