

# DINGYU SHI

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## EDUCATION BACKGROUND

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### Nankai University

September 2021 - June 2023(Expected)

Master of Management

GPA: 90.66/100

**Relevant Courses:** Social Network Analysis (94.4), Web Intelligence Mining (92), Research Methods of Information Management (94.5), Research on Information Service and Users (95)

### Nankai University

September 2017 - June 2021

Bachelor of Management

GPA: 87.65/100

**Relevant Courses:** JAVA Programming (100), Human-Computer Interaction (94), Statistics (92), Macroeconomics (90)

**Computational and Technical Skills:** Python (Advanced), Stata (Advanced), SmartPLS (Advanced), CiteSpace (Advanced)

## PUBLICATION

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### Published

- **Shi, D.**, Zhang, X., Liu, L., Hensen, P., Li, X., 2023 (Accepted). Monetization of First Questions by Text Mining: How Do Peer Patients Respond to Online Health Information in a Q&A Forum?. *Aslib Journal of Information Management*.
- Zhang, X., Tan, H., Yin, C. and **Shi, D.**, 2021. Does an image facilitate the sharing of negative news on social media? An experimental investigation. *Library & Information Science Research*, 43(4), p.101120.
- Liu, Y., Ren, C., **Shi, D.**, Li, K., and Zhang, X., 2020. Evaluating the social value of online health information for third-party patients: Is uncertainty always bad?. *Information Processing & Management*, 57(5), p.102259.
- **Shi, D.**, Ren, C. and Zhang, X., 2020. Evaluating the Information Usefulness of Online Health Information for Third-party Patients. *WHICEB 2020 Proceedings*. 66.

### Manuscripts in Progress

- **Shi, D.**, Zhang, X., Liu X., Exploring the signaling effect of physicians' communication skills reflected in the online health articles.
- Zhang, X., **Shi, D.**, Li, K., The Impact of Freemium Strategy on Patient Consultation Behavior: Evidence from Online Health Communities.

## RESEARCH EXPERIENCE

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### The Impact of Freemium Strategy on Patient Consultation Behavior: Evidence from Online Health Communities.

Tianjin, China

Supervisor: Dr. Xiaofei Zhang & Dr. Kai Li of Nankai University

January 2022-

- Explored the role of freemium strategy in online health communities from two perspectives:
  - 1) Whether offering three free questions to patients demotivate them to make subsequently paid consultations?
  - 2) What kinds of questions will the paid patients ask after the freemium strategy?
- Crawled 12518 physicians-patient interactions on Haodf.com and explored the influence of freemium strategy in OHC with regression discontinuity (RD) and difference-in-difference (DID) method.

### Exploring the signaling effect of physicians' communication skills reflected in the online health articles. Tianjin, China

Supervisor: Dr. Xiaofei Zhang of Nankai University & Dr. Xiao Liu of Arizona State University

May 2021-

- Aimed at evaluating the intrinsic signals of physician service quality which can be shown through online health articles, so that the problem of physician selection difficulties before paying can be solved.
- Adopted deep learning methods such as the "wide & deep" model & LDA to predict figurative language use, physician empathy, and the number of topics of 185210 online health articles. The model achieved 98% accuracy on the test set.

## **Monetization of First Questions by Text Mining: How Do Peer Patients Respond to Online Health Information in a Q&A Forum?**

**Tianjin, China**

*Supervisor: Dr. Xiaofei Zhang of Nankai University*

*January 2021 - October 2021*

- Explored a mode called “paying to view others’ answers” to understand how listeners (i.e., peer patients) make purchasing decisions based on limited information in online health Q&A forums.
- Crawled 1960 askers’ (i.e., focal patients) first questions on Yilu App through Java and verified the model through keyword matching and sentiment analysis. Concluded that the interrogative form, information detail, and askers experience reflected in the first questions are essential determinants of listeners’ purchasing decisions and the moderating effect of information urgency is critical in online healthcare.
- The project finally brought feasible suggestions on questioning guidelines developed by online health platforms.

## **Does an image facilitate the sharing of negative news on social media? An experimental investigation.**

**Tianjin, China**

*Supervisor: Dr. Xiaofei Zhang of Nankai University*

*May 2020 - January 2021*

- Focused on the role of images in shaping user decisions to share negative news on social media.
- Conducted a scenario-based online experiment on Sina Weibo, collecting 285 valid responses; Developed a structural equation model with SmartPLS.
- Figured out the role of images based on the human affective-cognitive model of information processing (HACIP), drawing on the conclusions below:
  - 1) Images in negative news induced users’ emotions and arousal.
  - 2) The presence of images strengthens the effect of negative emotion and weakens the effect of information uniqueness.
- Provided useful guidance for social media such as Sina Weibo to promote the spreading of news using images.

## **Evaluating the Social Value of Online Health Information for Third-party Patients: Is Uncertainty Always Bad?**

*Supervisor: Dr. Xiaofei Zhang of Nankai University*

*November 2019 – March 2020*

- Aimed at structuring the value evaluation mechanism of online health information so that the problem of a large amount of online medical information is unused can be solved.
- Interviewed employees concerned about AliHealth App based on the collaboration with AliResearch Institute, crawled 9315 physician-patient interactions through Java, and verified the model through keyword matching and sentiment analysis. Concluded that prevention and emotional information are essential determinants of information usefulness perceived by third-party patients, and the moderating effect of information uncertainty is two-sided.
- Improved the user interface of the AliHealth APP, especially optimizing physician recommendations and Q&A content, and ranked in the top ten among 358 programs of the “Alibaba Young Scholars Support Program” initiated by Alibaba Group.

## **EXTRACURRICULAR ACTIVITIES**

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### **"Challenge Cup" National College Student Curricular Academic Science and Technology Works Competition**

**Chengdu, China**

*keynote speaker*

*March 2022 - May 2022*

- Devoted ourselves to digging out the development pain points of the online health platform and putting forward solutions.
- Investigated the participation motivation of 298 doctors via the AliHealth App community in the form of an online questionnaire. Utilized research methods, including word segmentation, keyword matching, sentiment analysis, etc. Global.
- Applied previous research to several online health platforms in Tianjin and Changzhi.

### **Innovation and Entrepreneurship Vitality Index Competition**

**Nanjing, China**

*Co-founder*

*April 2020 - June 2020*

- Focused on how to measure the innovation and entrepreneurship vitality and its influencing factors, and explored its spatial-temporal change in Jiangsu province.
- Obtained data related to the supporting policies for innovation and entrepreneurship in Jiangsu Province for nearly 20 years, analyzing and testing the innovation and entrepreneurship vitality index through time series analysis methods.

- Provided suggestions concerning the regional and industrial distribution of financial support for innovation and entrepreneurship to the Jiangsu government.

## HONORS & AWARDS

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Innovation and Entrepreneurship Scholarship of Nankai University	<i>October 2022</i>
The First Prize Scholarship of Nankai University	<i>October 2019, October 2020</i>
The second prize of the "Challenge Cup" National College Student Curricular Academic Science and Technology Works Competition	<i>November 2021</i>
The third prize in the Global Innovation and Entrepreneurship Vitality Index Competition (16/426)	<i>June 2020</i>