Hyung Wook Choi

hc685@drexel.edu • choihywook.github.io

RESEARCH INTEREST

Data Science and Informatics

- Extracting semantic patterns from data and re-thread for convergence
- Clarifying semantic ambiguity and change of meanings throughout the time
- Designing customized information retrieval system, Visualizing data-driven network

EDUCATION

Drexel University, PA, USA

• Ph.D. in Information Science

Sep 2022 - Aug 2026

- · Advisor: Dr. Mat Kelly
- Recipient of Graduate College Gold Level Doctoral Fellowship from Drexel University
- · Core Classes

Science of Science, Qualitative Research and Data Analysis, NLP + X, Deep Learning's Side Effect

M.S. in Data Science

Sep 2019 – Mar 2022

- Honored with Upsilon Pi Epsilon National Honor Society for the Computing and Information Disciplines
- Core Classes

Introduction to Artificial Intelligence, Human-Computer Interaction, Web Systems & Architecture, Database Management Systems, Data Science Analysis and Interpretation

Ewha Womans University, Seoul, Republic of Korea

• M.A. in Library and Information Science

Sep 2015 - Aug 2017

- Dissertation: An Investigation on Data-Driven Sociology
- Adviser: Dr. EunKyung Chung
- Focus: Data Citation Index, Data Visualization, Network Analysis, Scholarly Network
- B.S. in Library and Information Science

Mar 2011 – Aug 2015

- · Acquisition of 2nd Formal Librarian license
- B.S. in International Office Administration
 - Double Major

IESEG School of Management, Paris-La Défense, France

International Summer Academy

Jul 2012 - Aug 2012

Core Classes

International Human Resources Management, International Business Law, Market Research Survey

Certification from Coursera

- Machine Learning Foundations: A Case Study Approach by University of Washington
- Web of Data by EIT Digital
- Python for Everybody Specialization by University of Michigan

PUBLICATIONS

JOURNALS

- Phuong Nguyen, Melody K Schiaffino, Zhan Zhang, Hyung Wook Choi, Jina Huh-Yoo, "Toward alert triage: scalable qualitative coding framework for analyzing alert notes from the Telehealth Intervention Program for Seniors (TIPS)" *JAMIA Open*, 6(3). Oct 2023. [SCI]
- Ye-Jin Choi, Hyung Wook Choi, Soon Kim, "Preprint acceptance policies of Asian academic society journals in 2020" *Science Editing*, 8(1), 10-17. Feb 2021. [SCOPUS] [Best Paper Award]
- Couri VanDam, Bum Chul Kwon, Stephanie Chiuve, <u>Hyung Wook Choi</u>, Paul Entler, Shelia Cotton, Pang-Ning Tan, Jina Huh-Yoo, "Improving Heart Disease Risk Through Quality-Focused Diet Logging: Pre-post Study of a Diet Quality Tracking App," *JMIR mHealth and uHealth*, 8(12), e21733. Dec 2020. [SCI]
- Ye-Jin Choi, Hyung Wook Choi, Soon Kim, "Compliance of "principles of transparency and best practice in scholarly publishing" in Korean academic society-published journals listed in Journal Citation Reports," *Science Editing*, 7(1), 24-33. Feb 2020. [SCOPUS]

- Hyung Wook Choi, Ye-Jin Choi, Soon Kim, "Compliance of "Principles of transparency and best practice in scholarly publishing" in academic society published journals," *Science Editing*, 6(2), 112-121, Aug 2019. [SCOPUS]
- Hyung Wook Choi, Ye Jin Choi, Soon Kim, "Network analysis of scientific collaboration in North Korea," *Science Editing*, 6(1), 25-34, Feb 2019. [SCOPUS]
- Soon Kim, Hyung Wook Choi, "Status of digital standards, licensing types, and archiving policies in Asian open access journals registered in Directory of Open Access Journals," *Science Editing*, 6(1), 41-46, Feb 2019. [SCOPUS]
- Soon Kim, <u>Hyung Wook Choi</u>, Nayon Kim, EunKyung Chung, Jae Yun Lee, "Comparative analysis of manuscript management systems for scholarly publishing," *Science Editing*, 5(2), 124-134, Aug 2018. [SCOPUS]
- Hyung Wook Choi, Ye-Jin Choi, So-Yeon Nam, "Time Series Analysis of Intellectual Structure and Research Trend Changes in the Field of Library and Information Science: 2003 to 2017," *Journal of the Korean Society for Information Management*, 35(2), 89-114, Jun 2018. [KCI, Accredited by National Research Foundation of Korea]
- Hyung Wook Choi, EunKyung Chung, "An Investigation on Characteristics and Intellectual Structure of Sociology by Analyzing Cited Data," *Journal of the Korean Society for Information Management*, 34(3), 109-124, Sep 2017. [KCI, Accredited by National Research Foundation of Korea]

PROCEEDINGS / POSTERS

- Hyung Wook Choi, Mat Kelly, "Documenting Semantic Shifts Across Domains with Version Control," Document Academy 2024 Annual Meeting (DOCAM '24). Sep 2024.
- Hyung Wook Choi, Mat Kelly, "On Identifying Points of Semantic Shift Across Domains," the 17th International Conference on Metadata and Semantic Research (MTSR 2023). Oct 2023.
- Hyung Wook Choi, Mat Kelly, "Examining Existing Approaches Toward Semantic Disambiguation,"
 Knowledge Organization across Disciplines, Domains, Services and Technologies, 349-352. May 2022.
- Hyung Wook Choi, Rose Ann DiMaria-Ghalili, Mat Kelly, Alexander Poole, Erjia Yan, Jina Huh-Yoo, "Older Adults and Technology Use: A Systematic Literature Review," *Innovation in Aging*, 4(Suppl 1): 823. Dec 2020.
- Hyung Wook Choi, "A Case Study on the Public Big Data Production and Distribution Status in the US," Proceedings of the 24th Conference of Korean Society for Information Management, Aug 2017.
- <u>Hyung Wook Choi</u>, "A Study on the Characteristics of Sociology Using Data Citation Index," *Workshop on Network Big Data Analysis for Information Management*, Feb 2017.
- Hyung Wook Choi, "An Analysis of Characteristics of Interdisciplinary Journals by Examining Co-Author Network," in Proceedings of the 23th Conference of Korean Society for Information Management, 23-27. Aug 2016.

RESEARCH EXPERIENCE

Preserving Personalized Advertisements for More Accurate Web Archives

Research Assistant, Drexel University

- Aug 2024 Jul 2026
- Supervisor: Dr. Mat Kelly, Dr. Alex Poole, Dr. Michele Weigle, Dr. Michael Nelson
- · Funding Institution: Institute of Museum and Library Services (IMLS) FY2024 National Leadership Grants
- Persona development related to personalized web ads
- Evaluating data relative to web archives' holdings and captures based on users' expectations

Saving Ads: Assessing and Improving Web Archives' Holdings of Online Advertisements

Research Assistant, Drexel University

- Dec 2023 Aug 2024
- Supervisor: Dr. Mat Kelly, Dr. Alex Poole, Dr. Michele Weigle, Dr. Michael Nelson
- Funding Institution: Institute of Museum and Library Services (IMLS) FY2022 National Leadership Grants
- Reviewed on literature about web advertisements and dynamic contents

LIS Education And Data Science-Integrated Network Group (LEADING)

• Research Assistant, Drexel University

Dec 2023 – Jun 2024

- Supervisor: Dr. Mat Kelly, Dr. Jonathan Wheeler, Dr. Weimao Ke, Dr. Lei Wang
- Funding Institution: Institute of Museum and Library Services (IMLS), Laura Bush 21st Century Librarian Program (LB21)
- · Architecturing in how to pull and archive the e-learning systems materials
- · Conducted overall review on the materials and organized into papers

A Visual Analytic Observatory of Scientific Knowledge (VAO)

• Research Assistant, Drexel University

Feb 2020 - Jun 2020

- Supervisor: Dr. Choamei Chen
- Funding Institution: NSF (Award 1633286)
- Collected and analyzed COVID-19 related studies and articles extensively
- Conducted comprehensive data visualization of collected dataset to clarify the relations

Metrics Development for Research Data Use

• Research Assistant, Ewha Womans University

May 2018 - Oct 2018

- Supervisor: Prof. EunKyung Chung
- Funding Institution: Korea Institute of Science and Technology Information (KISTI)
- Complete enumeration research on data citation standard and examples
- Participated on developing a new metrics to include citation and usage of shared research data
- Collected and analyzed the status of research data usage from discrete journals

An Approach on Promoting Big Data Uses with National Library of Korea

Research Assistant, Ewha Womans University

Jun 2017 - Sep 2017

- Supervisor: Prof. EunKyung Chung
- Funding Institution: Korea Institute of Science and Technology Information (KISTI) & ARGONET Co.
- Conducted comprehensive analysis on distribution and utilization status of public open data in Europe and Singapore
- Assisted on deriving the role of the National Library to facilitate the use of Big Data

Development of Global Scholarly Communication Platform and Online Journal Publishing System

Research Assistant, Ewha Womans University

Jun 2017 – Sep 2017

- Supervisor: Prof. Jae-Yun Lee & Prof. EunKyung Chung
 - Funding Institution: National Research Foundation of Korea
- Researched current status of online journal publishing platforms to suggest a paragon for Korean companies
- · Conducted comprehensive analysis on platforms of Elsevier, Editorial Manager, and ScholarOne

Public Library Specialization Service Plan through Library Big Data Analysis

• Research Assistant, Ewha Womans University

Jun 2016 – Sep 2016

- Supervisor: Prof. EunKyung Chung
 - Funding Institution: Korea Institute of Science and Technology Information
- Collected book checking out data from public library in Seoul
- · Analyzed on user group data, user book checking out pattern, and specialization service proposal by region

AWARDS & SCHOLARSHIPS

Research Assistant Scholarship

Sep 2022 – Aug 2026

Institution: Drexel University

Full scholarship for the doctoral program

Graduate College Gold Level Doctoral Fellowship

Sep 2022 – Aug 2024

Institution: Drexel University

For winning a open competition in Drexel's doctoral-level programs

■ Code4Lib 2022 Diversity Scholarship

May 2022 – May 2022

Institution: Code4Lib

For attending at Code4Lib 2022 in Buffalo, NY

Upsilon Pi Epsilon National Honor Society

Oct 2020 - Oct 2020

Institution: Upsilon Pi Epsilon International Society

Honored for achieving outstanding achievement in Computing and Information disciplines

Research Assistant Scholarship

Feb 2020 – Jun 2020

Institution: Drexel University

For assisting Prof. Chaomei Chen with a NSF Granted project

Research Assistant Scholarship

Sep 2016 – Dec 2016

Institution: Ewha Womans University

For assisting Prof. EunKyung Chung for class and project research

■ Koo Ja-Young Scholarship

Mar 2016 – Aug 2016

Institution: Ewha Womans University

For assisting the department by managing the budget

Department Assistant Scholarship

Sep 2015 – Dec 2015

Institution: Ewha Womans University

For assisting the department comprehensively

Social Science Scholarship

Mar 2013 – Aug 2013

Institution: Ewha Womans University For working as an Student IT Assistant ■ Ewha Serving-Truth Scholarship

Institution: Ewha Womans University

For working as an Ewha Weekly Newspaper Senior Journalist

• Ewha Serving-Goodness Scholarship

Institution: Ewha Womans University

For working as an Ewha Weekly Newspaper Junior Journalist

Mar 2012 - Aug 2012

Sep 2012 – Dec 2012

SKILLS

Programming Language Python, Java, C, R, SQL, LATEX.

Web Development HTML, CSS, JavaScript Visualization NodeXL, CiteSpace

Language English (fluent), French (DELF A1)

PROFESSIONAL AFFILIATIONS & ACTIVITIES

National Library for Children and Young Library Internship

Seoul, Republic of Korea

Department of Information Service

Jul 2014 – Aug 2014

Assisted on library program planning and operating

· Conducted research on information service planning

Korea Institute of Science and Technology Information (KISTI) Internship

Daejeon, Republic of Korea

Department of Computer Intelligence Research

Dec 2013 - Feb 2014

• Conducted research on Linked Open Data (LOD) and the platform

Conducted research on usage of LOD in overseas and analyzed the characteristics of the system

CAMPUS ACTIVITIES

Ewha Writing-Intensive School Ewha Womans University

Completed the 4 week Ewha Writing-Intensive School

Jun 2015 - Jul 2015

• Wrote an academic paper under the supervision by Prof. Hodges

Ewha Creative Academy Ewha Womans University

Completed 'English for Business Interaction' course

Mar 2014 – Jun 2014

Took the course for academic and business purpose English

Ewha Weekly Newspaper Ewha Womans University

Senior Journalist

Sep 2011 – Aug 2013

• Mainly worked as photojournalist

• Also contributed articles and editorial cartoons

• Supervised junior and intern reporters in the photography division

• Supervised the editing process of the newspaper overall