# Jeffrey R. Tharsen 康森傑

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**The University of Chicago, Division of the Humanities, Forum for Digital Cultures** *Associate Director of Technology*January 2022 – Present

- Leads university-wide humanities research application and resource development
- Designs new computational methods, toolkits and platforms for humanistic inquiry
- Trains faculty, students and researchers in computational methods, digital technologies and digital resources
- Designs curricula and teaches courses in Advanced Data Analysis, A.I., Deep Learning, and NLP/NLU
- Advises divisional students pursuing degrees in Digital Studies/Deep Learning/DH/NLP/NLU
- Trains students at all levels in computational methods and digital technologies
- Researches digital and computational methods for humanistic inquiry
- Serves as PI on grants awarded, leads research teams

**The University of Chicago, Digital Studies of Language, Culture, and History**Lecturer in the Humanities and in the College

- Designs curricula and teaches courses in Deep Learning, Advanced Data Analysis, and NLP/NLU (Natural Language Processing / Natural Language Understanding)
- Leads all seminars (2 per week over Zoom), evaluates all assignments and exams, all grading and advising

**The University of Chicago, Research Computing Center** (Chicago, IL) September 2015 – January 2022 *Computational Scientist for the Digital Humanities* 

- Led university-wide humanities and social scientific research application and resource development
- Designed new computational methods, toolkits and platforms for humanistic and social scientific inquiry
- Led workshops, hackathons and tutorials on computational methods and HPC for humanistic inquiry
- Trained faculty, students and researchers in computational methods, digital technologies and digital resources

### **EDUCATION**

**Ph.D.** University of Chicago (Chicago, IL): East Asian Languages & Civilizations, awarded December 2015.

Dissertation: "Chinese Euphonics: Phonetic Patterns, Phonorhetoric and Literary Artistry in Early Chinese Narrative Texts"

Committee: Edward Shaughnessy, Donald Harper, Haun Saussy

Qualifying Exams (June 2012): Chinese Poetics; Paleography; Phonology/Chinese Phonology Digital Sinology and Digital East Asia Workshop, Founder and Coordinator, Nov. 2014 – June 2015

- M.A. University of Chicago (Chicago, IL): East Asian Languages & Civilizations, awarded June 2012. Coursework Areas: Chinese Paleography; Early Chinese Excavated Manuscripts; Early Chinese Buddhist Texts; Advanced Classical Chinese Poetry; Advanced Classical Chinese; Adv. Readings in Literary Chinese/The Book of Han《漢書》; The Classic of Poetry《詩經》; The Classic of Changes《易經》; Chinese History and Historiography/The Chunqiu Zuozhuan《春秋左傳》; Pedagogies of Writing (Writing Program); World Poetry (Anthropology Dept.); Elementary and Intermediate Modern Japanese; Meiji-Showa Period Japanese Novels; Phonetics and Phonology (Linguistics Dept.); Sumerian II (NELC)
- **B.A.** Lewis & Clark College (Portland, OR). Major: Foreign Languages (French, German); Minor: English (Literature and Poetics), awarded August 1996.

## TEACHING EXPERIENCE (See also Presentations and Lectures on p.6-8 & Workshops on p.8-11)

**University of Chicago, Digital Studies of Language, Culture, and History** (Chicago, IL) March – June 2024 *Artificial Intelligence and the Humanities* 

- Advanced course in artificial intelligence, A.I. architectures and A.I. ethics for humanities students
- Creates all materials and tutorials for the course (syllabus available on request)
- Leads all seminars, advises students, evaluates all assignments and exams

**University of Chicago, Digital Studies of Language, Culture, and History** (Chicago, IL) March – June 2024 *Digital Texts II: Machine Learning, Deep Learning and A.I. for Textual, Linguistic and Cultural Analysis* 

- Deep learning approaches for advanced multilingual textual and linguistic analysis
- Creates all materials and tutorials for the course (syllabus available on request)
- Leads all seminars, advises students, evaluates all assignments and exams

**University of Chicago, Digital Studies of Language, Culture, and History** (Chicago, IL) March – June 2023 *Digital Texts II: Machine Learning, Deep Learning and A.I. for Textual, Linguistic and Cultural Analysis* 

- Deep learning approaches for advanced multilingual textual and linguistic analysis
- Creates all materials and tutorials for the course (syllabus available on request)
- Leads all seminars, advises students, evaluates all assignments and exams

University of Chicago, Digital Studies of Language, Culture, and History (Chicago, IL)

Jan. – March 2023

Data Analysis for Humanists II

- Advanced data analysis course based in R
- Created all tutorials for the course (RStudio Workbooks) (syllabus available on request)
- Led all seminars, advises students, evaluates all assignments and exams

University of Chicago, Digital Studies of Language, Culture, and History (Chicago, IL) March – June 2022 Data Analysis for Humanists III: Deep Learning

- Deep learning approaches to advanced data analysis (codebase largely in Python)
- Created all tutorials for the course (syllabus available on request)
- Led all seminars, advised students, evaluated all assignments and exams

University of Chicago, Digital Studies of Language, Culture, and History (Chicago, IL)

Jan. – March 2022

Data Analysis for Humanists II

- Advanced data analysis course based in R
- Creates all tutorials for the course (as RStudio Workbooks) (syllabus available on request)
- Leads all seminars (2 per week over Zoom), advised students, evaluated all assignments and exams

University of Chicago, Digital Studies of Language, Culture, and History (Chicago, IL) March – June 2021 Natural Language Processing

- Course based in Python and designed for students in the Digital Studies program
- Created all tutorials for the course in Jupyter Notebook / Python (incl. machine learning/NN/DL algorithms)
- Led all seminars (2 per week over Zoom), advised students, evaluated all assignments and exams

University of Chicago, Digital Studies of Language, Culture, and History (Chicago, IL)

Jan. – March 2021

Data Analysis for Humanists II

- Advanced data analysis course based in R
- Created all tutorials for the course as RStudio Workbooks
- Led all seminars (2 per week over Zoom), advised students, evaluated all assignments and exams

University of Chicago, Digital Studies of Language, Culture, and History (Chicago, IL)

Natural Language Processing

Jan. – March 2019

- Course based in Python and designed for students in the Digital Studies program
- Created all tutorials for the course in Jupyter Notebook (incl. machine learning/NN algorithms)
- Led all seminars (3 per week), advised students, evaluated all assignments and exams

University of Chicago, Digital Studies of Language, Culture, and History (Chicago, IL) Sept. – Dec. 2018

Data Analysis for Linguistic, Cultural, and Historical Research

- Course based in R and designed for students in the Digital Studies program
- Created all tutorials for the course as RStudio Workbooks
- Led all seminars (3 per week), advised students, evaluated all assignments and exams, submitted all grades

**UChicago Graham School of Continuing, Liberal, and Prof. Studies** (Chicago, IL) *Taiwan: Past, Present, Future*January – June 2015

- Course designed for 20 adult learners (continuing education)
- Developed learning objectives related to East Asian history, culture and geopolitics

## University of Chicago, Dept. of East Asian Lang. & Civ. (Chicago, IL)

Sept. 2011 – June 2012

Undergraduate Thesis Tutorial I-III (Autumn, Winter, Spring)

- Provided one-on-one advising for all senior undergraduates writing senior theses (5 students)
- Led seminar discussions on research practices and writing strategies, with focus on argumentation
- Communicated student progress to faculty advisors

## University of Chicago, Dept. of East Asian Lang. & Civ. (Chicago, IL)

March – June 2011

Confucius and Laozi (孔子與老子) [Course Assistant]

- Supported class of 20 students, assisted students with written composition and research strategies
- Organized extracurricular reading sessions of original source materials

University of Chicago, Dept. of East Asian Lang. & Civ. (Chicago, IL) Sept. – Dec. 2009, Sept. – Dec. 2010 Introduction to East Asian Civilizations – China [Course Assistant]

- Assigned and graded all written assignments; graded all examinations
- Led weekly discussion sections (~25 students each)
- Held regular office hours; assisted professor with various course-related administrative duties

## **Sichuan University** (Chengdu, Sichuan, P.R.China)

August 1998 – July 1999

Foreign Language Training Center, English Dept.

- Developed complete curricula and materials for all courses taught: English Literature, Advanced English Composition, Intermediate English Reading, Advanced English Reading, Intermediate/Advanced English Conversation, American Culture & Media
- Delivered weekly lectures on English Language & Literature and American Culture

### **UNIVERSITY SERVICE**

## **Digital Humanities Forum**, University of Chicago Division of the Humanities

Sept. 2016 – present

Co-chair, with Carmen Caswell

• Oversees all operations of the DH Forum: inviting speakers, moderating panels, budgeting and administration

### **Theses Supervised:**

2023 : Gil Rosenthal, Master of Science in Computer Science

2022 : Jode Sparks, Master of Arts in Digital Studies

Weihang Zhou, Master of Arts in the Humanities

2021: Jonathan Kim, Master of Arts in Digital Studies

Guadelupe Blanco, Master of Arts in Digital Studies

Cherry Ying, Master of Arts in Digital Studies

2020 : Abhishek Pandit, Masters in Computational Social Science

2019: Junshu Liu, Master of Arts in Digital Studies

Keane Costello, Master of Arts in Digital Studies

#### **Oversight Committees and Boards:**

2023 – present	Hong Kong University, Big Data Studies Lab Oversight Committee
2023 – present	ADHO Multilingual Digital Humanities working group
2023 – present	DARIAH-EU Multilingual Digital Humanities working group
2022 – present	University of Chicago, Digital Studies Program Technical Advisory Board
2021 – present	ADHO, DH Tech Special Interest Group Steering Committee
2020 – present	ACH, Multilingual and Multicultural (MLMC) Committee
2019 - 2022	Seoul National University, Big Data Lab Oversight Committee

### **PROFESSIONAL ORGANIZATIONS**

Association of Digital Humanities Organizations (ADHO) Joint Membership (ACH, EADH, CSDH/SCHN, AADH, JADH), 2015-present

Association for Asian Studies (AAS), 2013-present

Modern Language Association (MLA), 2014-present

## **Recent Conferences and Symposia Organised:**

Nov. 9-10, 2019 Chicago Colloquium for Digital Humanities and Computer Science, University of Chicago, Division of the Humanities (co-chair: Carmen Caswell)

Nov. 2, 2019 "Tools and Methods for Digital China Studies: Across and Outside the Disciplines", University of Chicago, Center for East Asian Studies (co-organizer: Haun Saussy)

## **Creel Center for Chinese Paleography, University of Chicago**

Sept. 2014 – June 2015

Center Coordinator

• Oversaw all operations of the Creel Center, including conference hosting and administration for all workshops and events; developed Center website (cccp.uchicago.edu) and all hosted digital course content

## Digital Sinology and Digital East Asia Workshop, University of Chicago

Sept. 2014 – June 2015

Founder and Coordinator

- Led monthly interdisciplinary discussions and bimonthly training sessions for faculty and students
- Facilitated all logistics for visiting faculty and student speakers
- Selected speakers; managed workshop website

## China Before Print Workshop, University of Chicago

Sept. 2009 – June 2011

Coordinator

- Led monthly discussions
- Facilitated all logistics for visiting faculty and student speakers
- Selected speakers; managed workshop website

## **Served as Peer Reviewer for:**

Cultural Analytics; International Journal of Digital Humanities; Digital Scholarship in the Humanities; Journal of Chinese History; Korean Studies; Journal of the Japanese Association for Digital Humanities; Computing and Cultural Heritage

## **LANGUAGES**

Native: English

Near-native/fluent: Chinese (Mandarin 普通話/國語); German; French; Swedish Literate/conversational: Spanish; Norwegian; Japanese; Italian; Hindi; Flemish

Ancient language training: Chinese (classical, preclassical, phonology, paleography); Sumerian

### **TECHNICAL SKILLS**

**Digital Humanities**: computational philology; digital lexicography; NLP/NLU; machine learning/deep learning/A.I.; OpenMP/MPI/HPC and parallel computing; transformers (BERT, GPT 2-x, ELMo, DALL-E, CLIP, GAN); multilingual text analysis; morphological analysis; paleographic analysis; computer vision; corpus linguistics; network analysis; data visualization (R, bokeh/rbokeh, D3, gephi); vector space modeling (word2vec, BERT); database architectures, development and optimization (hierarchical, graph, noSQL); GIS and geospatial data analysis (ArcGIS, QGIS, CartoDB); stylometry; topic modeling; text encoding; TEI; OCR; photogrammetry; SketchFab; Palladio; Tableau; others

**Programming languages**: C; C++; Java; Javascript; Python; R; Perl; PHP; SQL; CSS; HTML; CGI; elasticsearch; Visual Basic/vbscript; LibreOffice XML; others

**Administration/Networking:** Windows 11/10/8/7/Vista/XP/2000/NT/Me/.Net; \*NIX (UNIX SunOS/Solaris, Linux); Mac OS 6.x-10.x and iOS; MySQL; LAN/WAN (TCP/IP, SSL, DHCP, SSH); MediaWiki; Drupal; WordPress

Hardware/Architecture: x86/x64 PC/HPC; Macintosh; Sun/Solaris

## **AWARDS & HONORS**

Jan. 2017	DHAsia Fellowship awarded, Center for Spatial and Textual Analysis, Stanford University
May 2013	Center for East Asian Studies Dissertation Writing Fellowship awarded, University of Chicago
April 2012	J. William Fulbright U.S. Scholar Fellowship awarded (P.R.China: Fudan U.), U.S. Dept. of State
June 2007	University of Chicago Fellowship awarded, University of Chicago (Duration: 5 years)
June 2006	Taiwan Graduate Study Scholarship awarded, Taiwan Ministry of Education
Feb. 2005	The International Library of Poetry, International Open Poetry Contest, semi-finalist
Sept. 2004	Taiwan Scholarship awarded, Taiwan Ministry of Education via U.S. Dept. of Education

## **PEDAGOGY TRAINING**

## University of Chicago Center for Teaching and Learning (Chicago, IL)

May 2014	Workshop on Assignment Design
May 2014	Workshop on Course Design
Jan. 2014	Seminar on Course Design
Sept. 2013	Workshop on Teaching in the College
Sept. 2010	Workshop on Teaching in the College
Summer 2010	Pedagogies of Writing
Sept. 2009	Workshop on Teaching in the College

#### **PUBLICATIONS**

## In process:

- "Offering for Qu Yuan 祭屈原文." In Eternal Nostalgia: an Anthology of Mourning Poems and Prose/Essays from Imperial China, eds. Victor Mair and Zhenjun Zhang, Columbia University Press. Forthcoming 2023.
- "Computational Methods to Identify Phonorhetoric and Phonological Patterns as Text-Structuring Devices in Early Chinese Prose", in "Warp, Weft, Wen / Phoneme, Pattern, Pun Structural Approaches to Chinese Texts", Studies in the History of Chinese Texts, Brill. Series Editors: Martin Kern, Robert Hegel, D.X. Warner.

## In print:

- "From Form to Sound 自形至聲: Visualizing Computational Analyses of Premodern Chinese Phonology and Phonorhetoric with Applications for Phonetic Scripts." *International Journal of Digital Humanities* 1.4, 2022. doi.org/10.1007/s42803-022-00053-8
- Tharsen, Jeffrey and Gladstone, Clovis. "TextPAIR Viewer (TPV) 1.0: An Interactive Visual Toolkit for Exploring Networks of Text Alignments and Text Reuse." *Shuzi renwen* 數字人文 2, 2022.
- Dombroski, Quinn; Gniady, Tassie; Kloster, David; Meredith-Lobay, Megan; Tharsen, Jeffrey and Zickel, Lee. "Voices from the Server Room: Humanists in HPC." In *Debates in the Digital Humanities*, University of Minnesota Press, 2021. Series Editors: Jessica Marie Johnson, David Mimno, Lauren Tilton.
- "Chinese Euphonics: Phonetic Patterns, Phonorhetoric and Literary Artistry in Early Chinese Narrative Texts", Ph.D. dissertation, University of Chicago, 2015. (*Chinese Euphonics*: manuscript under contract and accepted for publication, DeGruyter "Worlds of East Asia" series, publication 2024.) <a href="https://doi.org/10.6082/M1XS5S9K">https://doi.org/10.6082/M1XS5S9K</a>
- Tharsen, Jeffrey and Gladstone, Clovis. "Using Philologic For Digital Textual and Intertextual Analyses of the Twenty-Four Chinese Histories 二十四史." *Journal of Chinese History* 4.2, 2020: 558–63. doi.org/10.1017/jch.2020.27
- "Comparative Phonorhetorical Analyses of Speeches in the *Zuo Commentary* and the *Discourses of the States*", In *Journal of Chinese Literature and Culture* 6.2, Autumn 2019. Journal Editor: Cai Zong-qi 蔡宗齊. <a href="https://www.chinesepoetryforum.org/?page\_id=858#6.2">https://www.chinesepoetryforum.org/?page\_id=858#6.2</a>

- 〈早期中国散文中作为文本构建工具的音韵修辞和音韵模式〉 ["Phonorhetoric and Phonological Patterns as Text-Structuring Devices in Early Chinese Prose"], In *Studies in Prosodic Grammar*《韻律語法研究》 2019 (2), Autumn 2019. Journal Editor: Feng Shengli 馮勝利. <u>ISBN 978-7-5619-4894-1</u>
- <u>The Digital Etymological Dictionary of Old Chinese</u> 《古漢語詞源字典》, digital metadictionary and suite of computational tools designed to assist with the analysis of phonetic and phonorhetorical structures in Chinese texts, 2010-present. Accessible online at <a href="edoc.uchicago.edu">edoc.uchicago.edu</a>
- *chapakhana*, website featuring series of interactive maps in CartoDB allowing users to explore the history of printing in South Asia, including a gallery of images taken from the printing houses and their publications, 2017-19 (PI: U.Stark, website designer: S.Elahi). Accessible online at chapakhana.rcc.uchicago.edu
- The Sign And Gesture Archive (SAGA), large-scale digital archive of videos of signers/homesigners, gesturers and speakers plus associated metadata and annotation/coding files, including basic and advanced search and view modules with full security apparatus for IRB privacy controls, 2015-present. Currently in development; accessible online at saga.rcc.uchicago.edu
- "Review: Reading Philosophy, Writing Poetry by Wendy Swartz", In CLEAR (Chinese Literature: Essays, Articles, Reviews) 40 (2018). Editor: William H. Nienhauser, Jr. ISSN 0161-9705
- Co-Editor, with Thomas J. Mazanec and Chen Jing. *Digital Methods for Traditional Chinese Literary Studies*. Journal of Chinese Literature and Culture 5.2, Special Edition, November 2018. Journal Editor: Cai Zong-Qi 蔡宗齊. ISBN 978-1-4780-0496-7
- Tharsen, Jeffrey R., Mazanec, Thomas J. and Chen Jing. "Introduction" In *Digital Methods for Traditional Chinese Literary Studies*, *Journal of Chinese Literature and Culture* 5.2, Special Edition, November 2018. doi.org/10.1215/23290048-7256950
- Liu Chao-Lin 劉昭麟, Mazanec, Thomas J. and Tharsen, Jeffrey R. "Exploring Chinese Poetry with Digital Assistance: Examples from Linguistic, Literary, and Historical Viewpoints," In *Digital Methods for Traditional Chinese Literary Studies*, *Journal of Chinese Literature and Culture* 5.2, Special Edition, November 2018. doi.org/10.1215/23290048-7257002
- The Visual Text Explorer (VTE), user-customizable interactive digital visual interface designed for analytics of words and phrases in user-provided sources, allowing for simultaneous close and distant reading and multidimensional data analytics, 2016-2018. Accessible online at edoc.uchicago.edu/vte
- *Intertext*, digital toolkit designed to assist with the identification and philological analysis of words and phrases through series of texts, 2015-2018. Currently in beta; prototype accessible at <a href="edoc.uchicago.edu/textccr4">edoc.uchicago.edu/textccr4</a>
- "The Bells of Liang Qi 梁其鐘: A Musical Reading of a 9th-century BCE Chinese Bronze Inscription" In *Cornell Classical Chinese Colloquium Guided Readings Series*. Series Editor: Robin MacNeal.
- "Digital Resources for Sinologists 1.0", with Holger H. G. Schneider, *Dissertation Reviews*, Published May 27, 2014. Accessible online at <u>dissertationreviews.org/archives/9213</u>
- "The 'Offerings' Chapter of the *Wen xuan*《文選·祭文》", M.A. Translation presented to the University of Chicago, Dept. of East Asian Languages & Civilizations, June 2011
- "Poetic Diplomacy: The Practice of *Fu-shi* 賦詩 in Parallel Passages from the *Zuo zhuan*《左傳》 and *Guo yu* 《國語》", M.A. Thesis presented to the University of Chicago, Dept. of East Asian Languages & Civilizations, June 2011
- "The Paleography, Rhetorical Structure and Content of the Shanghai Museum Chu Bamboo Manuscript 'San de' 〈参德〉", M.A. Thesis presented to the University of Chicago, Dept. of East Asian Languages & Civilizations, June 2011
- "Sport and the 'Competitive Spirit' in Ancient China" 〈中國古代體育運動與競爭之關係〉, 2006
- "Note to Self", poem in Eternal Portraits, The International Library of Poetry, 2005

- Writing in a Foreign Language, Senior Thesis presented to Lewis & Clark College, Foreign Languages Dept., August 1996 [Subject: Reasons why authors chose to write in languages other than their native languages, and an English-French-German linguistic analysis of translations of the same short story.]
- "Traces de l'avenir", short story (French) in Polyglot, Vol. 6, 1995, Portland
- "Heimdefinitionen", essay (German) in Polyglot, Vol. 6, 1995, Portland
- "Rainmemories", poem in The Lewis & Clark Literary Review, Vol. 21, 1994, Ash Creek Press, Portland
- "Carrière', il m'a dit", essay (French) in *Polyglot*, Vol. 5, 1994, Portland
- "Cobblestones", poem in *The Lewis & Clark Literary Review*, Vol. 20, 1993, Ash Creek Press, Portland *Beginnings*, collection of poetry, 1992, Cal Central Press, Sacramento

Embark X, editor, collection of poetry, 1992, Cal Central Press, Sacramento

## SELECTED CONFERENCE PRESENTATIONS & FORMAL LECTURES

- "AI 时代的知识、语言、历史与教育学 Knowledge, Language, History and Pedagogy in the Age of A.I.", Beijing Forum, Peking University, P.R. China (November 2023)
- "Digitizing the *Messkataloge*: Revealing the History of German Publishers, Authors and Translators", DH2023, University of Graz, Austria (July 2023)
- "Advanced Computational Methods for Humanities and Social Sciences Research: Graph Databases, Deep Learning and A.I.", Max Planck Institute for the History of Science, Berlin (June 2023)
- "Digitizing the Messkataloge: Future Directions" Staatsbibliothek Berlin (June 2023)
- "文獻學、歷史學和考古學: 深度學習方法與圖像資料庫的應用 Deep Learning Methods and Graph Databases for Philology, History and Archaeology", Academia Sinica, Taiwan (June 2023)
- "The Graph Database Ecosystem as Primary Platform for the Study of Premodern Languages and Cultures", New Frontiers in Humanities Education: Digital Curation, Cultural Data Science, and Global Perspectives Conference, Hong Kong University (June 2023)
- "Advanced Research Infrastructures for Premodern East Asian Studies, Archaeology & History", Anyang and Beyond Conference, University of Chicago (April 2023)
- "Advanced Research Infrastructures for East Asian Studies & History: The Collaborative Online Research Environment (C.O.R.E.)", Tools of the Trade: The Way Forward Conference, Harvard University (March 2023)
- "Algorithmic Detection of Intertextuality (Text Reuse) in Digital East Asian Corpora", Tools of the Trade: The Way Forward Conference, Harvard University (March 2023)
- "The Study of Early Chinese Manuscripts in the Age of Digital Humanities", Warring States Perceptions of Shang Civilization Workshop, UNC Chapel Hill (December 2022)
- "The TextPAIR Viewer (TPV): Exploring Networks of Intertextual Relationships in Large-Scale Chinese Corpora", Third Tsinghua Digital Humanities Forum 第三届清华数字人文论坛:网络分析专题暨专刊发布会, Tsinghua University, Beijing (November 2022)
- "Representing Uncertanties: Algorithmic Approaches to Elucidating Phonological Patterns in Premodern Chinese", Trinity College, Dublin (October 2022)
- "Intertextuality in Large-Scale East Asian and Western European Corpora", DH2022 Annual Conference, Tokyo (July 2022)

- "The Sign And Gesture Archive (SAGA)", International Society for Gesture Studies (ISGS) Annual Conference, Loyola University Chicago (July 2022)
- "Digital Methods in East Asian Studies", New Digital Methods in East Asian Studies Webinar, University of Chicago Yuen Campus in Hong Kong (April 2022) <u>Link</u>
- "Comparative Vector Space Modeling of Tolkien's Works", MiddleMoot 2021: "Philology: Lover of Words, Friend of Words", Hawkeye Community College (October 2021)
- "The TextPAIR Viewer (TPV) 1.0: An Interactive Visual Toolkit for Exploring Large-Scale Networks of Textual Alignments and Text Reuses", with Clovis Gladstone, Historical Network Research on Chinese Studies Conference, Harvard University (July 2021) <u>Link</u>
- "The TextPAIR Viewer (TPV): An Interactive Visual Toolkit for Exploring Large-Scale Networks of Textual Alignments and Text Reuses", with Clovis Gladstone, Association for Computers and the Humanities (ACH) Biennial Conference (July 2021)
- "History of the Future", Big Data and the Historian's Craft Lecture Series, Lingnan University / Seoul National University (June 2021)
- "Natural Language Processing of East Asian Material", East Asian Digital Humanities Working Group, Princeton University (May 2021)
- "Global/Local Approaches to the Digital Humanities: Languages, Cultures, Communities", WMCI Chinese Scholarly Lecture Series, William & Mary (April 2021)
- "Natural Language Processing and Digital Philological Analysis for Asian Languages", Association for Asian Studies Annual Conference, Digital Technologies Expo (March 2021)
- "Listening to the Ancients: Digital Methods Applied to Premodern Phonology and Phonorhetoric", Early Text Cultures Reading Group, Oxford University (March 2021) Video
- "Natural Language Processing and Digital Philological Analysis for Asian Languages", Association for Asian Studies Annual Conference, Digital Technologies Expo (Conference cancelled due to Covid, moved to 2021)
- "Digital and Computational Approaches to Chinese Literature and Linguistics", Keynote Address, 6<sup>th</sup> International Conference on Chinese Prosodic Grammar, Southwest University, Chongqing (October 2019)
- "Reconstructing [and Algorithmically Producing] the Sounds of Medieval Texts", 54<sup>th</sup> International Congress on Medieval Studies, Western Michigan University (May 2019) [Panel: "Interdisciplinarity in Digital Medieval Studies", panel organizers: Lynn Ransom and Lisa Fagin Davis, *Digital Medievalist*]
- "Computational Methods for Asian Studies: Examples from Digital Sinology", Carolina Asia Center, University of North Carolina at Chapel Hill (April 2019)
- "Digital Philology: Pattern Identification in Pre-Modern Chinese Sources using Digital Lexica and Computational Methods", Association for Asian Studies Annual Conference, Digital Technologies Expo, Denver (March 2019)
- "Digital Philology, Digital Sinology and the Digital Humanities", WORD LAB Workshop, University of Pennsylvania (January 2019)
- "Digital Approaches to Premodern Chinese Phonology and Philology: Databases, Algorithms and Machine Learning", 2018 DH @ SNU Conference + Hackathon, Seoul National University (November 2018)
- "New Methods for Large-Scale Comparative Analyses and Visualizations of Semantic, Syntactic, and Phonetic Parallels in Asian Texts", DHAsia Summit Meeting, Stanford University (April 2018)
- "Phonorhetoric and Phonological Patterns as Text-Structuring Devices in Early Chinese Prose", Warp, Weft, Wen / Phoneme, Pattern, Pun Structural Approaches to Chinese Texts Conference, Universität Zürich (April 2018)

- "Comparative Phonorhetorical Analyses of Early Chinese Literary-Historical Texts: Visualizing Parallel Passages in the *Chunqiu Zuozhuan*《春秋左傳》and the *Guoyu*《國語》", Association for Asian Studies Annual Conference, Washington, D.C. (March 2018) [Panel: "Digital Methods for Traditional Chinese Literary Studies", panel organizer J.Tharsen]
- "Comparative Phonorhetorical Analyses of the *Zuo Commentary*《春秋左傳》 and the *Discourses of the States* 《國語》", Notes from the Digital Frontier: Patterns and Networks in Classical Chinese Literature Conference, University of California at Santa Barbara (February 2018)
- "The Bells of Liang Qi 梁其鐘: A Guided Reading of a 9th-century BCE Chinese Bronze Inscription", Classical Chinese Colloquium, East Asia Program, Cornell University (September 2017)
- "Designing Next-Generation Computational Systems for Philological, Phonorhetorical and Literary Analysis", DHAsia Lecture Series, Center for Spatial and Textual Analysis, Stanford University (January 2017)
- "The *Visual Text Explorer*: A Visual Textual Analytical Framework for Everyone", Chicago Colloquium on Digital Humanities and Computer Science (DHCS), University of Illinois at Chicago (November 2016)
- "Understanding the Databases of Premodern China: Harnessing the Potential of Textual Corpora as Digital Data Sources", Digital Research in East Asian Studies: Corpora, Methods, and Challenges Conference, Universiteit Leiden (July 2016)
- "From Digital Lexicography to Digital Philology", Association for Asian Studies Annual Conference, Seattle (April 2016) [Panel: "Digital Humanities Approaches to Chinese Culture, Part 1: Tools and Methods For Textual and Historical Analysis", panel co-organizers J.Tharsen and P.Vierthaler]
- "Digitizing the *Jingdian shiwen* 《經典釋文》: Deriving a Lexical Database from Ancient Glosses", Chicago Colloquium on Digital Humanities and Computer Science (DHCS), University of Chicago (November 2015)
- "Digital Sinology and the Future of Philology", Lives and Afterlives: The Future of Asian Studies -- Third Annual Trans-Asia Graduate Student Conference at the University of Wisconsin-Madison (March 2015)
- "The Poetry in the Prose: Comparative Analyses of Phonetic Structures and Prosody in Selected Western Zhou Bronze Inscriptions, the Earliest Chapters of the *Classic of Documents* and Speeches from the *Zuo Commentary* to the *Spring and Autumn Annals*", Stanford-Berkeley Premodern Chinese Humanities Graduate Student Conference, Stanford University (April 2014)
- "The Poetry in the Prose: Comparative Analyses of Phonetic Structures and Prosody in Selected Western Zhou Bronze Inscriptions and the Earliest Chapters of the *Classic of Documents*", 17th Annual Southeast Early China Roundtable, Western Kentucky University (November 2013)
- "《古漢語詞源字典》數據庫與西周青銅器銘文古聲韻系統研究簡介" ["A Brief Introduction to the Databases of the *Digital Etymological Dictionary of Old Chinese* and the Ancient Sound Systems of Western Zhou Bronze Inscriptions"], Center for the Study of Excavated Documents and Ancient Philology 出土文献与古文字研究中心, Fudan University 复旦大学 (May 2013)
- "Transcending the Etymon and Allofam: The Development and Utility of the *Digital Etymological Dictionary of Old Chinese*", Language Variation and Change Workshop, University of Chicago (May 2010).
- "Beyond Rhyme: The Development of the *Digital Etymological Dictionary of Old Chinese* and Examples of its Use in Textual Analyses from the Western Zhou to the Tang", Creel-Luce Paleography Conference, University of Chicago (April 2010)
- "Rhyme, Repetition and Rhetoric: An Examination of the Recently Discovered *Fan wu liu xing* 〈凡物流形〉 Texts", China Before Print Workshop, University of Chicago (May 2009)

- "The Development of the Threnodic Genres in Early China", China Before Print Workshop, University of Chicago (September 2009)
- "The Phonology and Tonal Patterning of Tang 唐 Poetry", DePaul University (February 2008)
- "Kingship in Accordance with Heaven's Mandate, Ruling the People with Virtue: The *Triad of Powers* 〈参德〉", United States-China Peoples Friendship Association Annual China Symposium, University of Chicago (January 2008)

## SELECTED RECENT WORKSHOPS AND PRESENTATIONS

- Chair and Moderator: "Exploring Methods in Multilingual DH", ACH Annual Conference (June 2023)
- Workshop: "Identifying and Visualizing Intertextuality: From N-grams to Neural Networks", New Horizons in Digital Humanities and Cultural Data Science Conference, Hong Kong University (June 2023)
- Chair and Moderator: "Computing Texts and Counting Meaning on the Margins: Challenges and Possibilities of Natural Language Processing in Asian Digital Humanities", AAS Annual Conference 2023, Boston (March 2023)
- Chair and Moderator: "Platforms and Cyberinfrastructure", Tools of the Trade: The Way Forward Conference, Harvard University (March 2023)
- Chair and Moderator: "Detecting Textual and Visual Copying of Sources in Chinese Local Gazetteers and Beyond", AAS Annual Conference 2023, Online (February 2023)
- Discussant: Gian Duri Rominger, "Digital Sound Excavations: Automated Detection of Rhyme Patterns for Early Chinese Texts", Stanford-Berkeley Graduate Student Conference In Premodern Chinese Humanities, Stanford University (April 2022)
- Workshop: "Introduction to the Digital Humanities", Research Computing Center, University of Chicago (October 2016; June 2017; November 2018; October 2019; October 2020; November 2021)
- Workshop: "Natural Language Processing with GPT-3 (by OpenAI)", Research Computing Center, University of Chicago (August 2021)
- Workshop: Running jobs on Research Computing Center Systems using the SLURM Batch Scheduler and Best Practices", Research Computing Center, University of Chicago (June 2021)
- Workshop: "Advanced Methods for Text Visualization", Research Computing Center, University of Chicago (May 2021)
- Workshop: "Advanced Interactive Visualizations for Data Analysis (Bokeh + TensorSpace)", Research Computing Center, University of Chicago (February 2021)
- Workshop: "Introduction to the Research Computing Center", Research Computing Center, University of Chicago (October 2019; January 2021)
- Workshop: "Introduction to the Research Computing Center and Computational Resources for Humanists and Social Scientists", Research Computing Center, University of Chicago (October 2020)
- Workshop: "Can a Neural Network write poetry? Leveraging next sentence prediction with transformers BERT and GPT-2", Research Computing Center, University of Chicago (July 2020)
- Workshop: "Deep Learning Frameworks for Natural Language Processing: BERT and ELMo", Research Computing Center, University of Chicago (June 2020)
- Lecture: "Network Theory and Network Visualizations with Gephi", Digital Studies Program, Data Analysis II, instructor: Michael Fox (February 2020)
- Workshop: "Neural Networks for Word Vectors and Word Embeddings in Python", Research Computing Center, University of Chicago (February 2020)
- Panel moderator: "Natural Language Processing and Authorship Attribution", Chicago Colloquium on Digital Humanities and Computer Science (DHCS), University of Chicago (November 2019)

- Lecture: "Network Theory and Network Visualizations", Department of History, Introduction to Digital History, instructor: Faith Hillis (November 2019)
- Lecture: "Natural Language Processing (NLP) + Stylometry + Topic Modeling", Department of History, Introduction to Digital History, instructor: Faith Hillis (November 2019)
- Lecture: "Basics of OCR, Text Repositories and Text Visualization", Department of History, Introduction to Digital History, instructor: Faith Hillis (October 2019)
- Lecture: "Basics of Tableau and Data Visualization", Department of History, Introduction to Digital History, instructor: Faith Hillis (October 2019)
- Workshop: "Introduction to GitHub", Environmental Sciences Bootcamp, University of Chicago (Sept 2019)
- Workshop: "Text Analysis for Non-Western Scripts", Research Computing Center, University of Chicago (August 2019)
- Workshop: "Advanced Methods for Textual Analysis: Stylometry, Topic Modeling and Text Visualizations", Research Computing Center, University of Chicago (May 2019)
- Workshop and Panel: "Digital Humanities Methods", Romance Languages & Literatures, University of Chicago (May 2019)
- Workshop: "Digital Humanities and Textual Analysis in the SAGE2 Environment", Research Computing Center, University of Chicago (April 2019)
- Panel: "Developing Data Science and Digital Humanities Programs", UNC Chapel Hill (April 2019)
- Workshop: "Digital Textual Analysis for Large-Scale Repositories (HathiTrust Data Capsule and others)", Research Computing Center, University of Chicago (March 2019)
- Panel moderator: "Poetics", Chicago Colloquium on Digital Humanities and Computer Science (DHCS), Loyola University (October 2018)
- Workshop: "Spatial Data Analysis", Environmental Sciences Computational Bootcamp, Research Computing Center, University of Chicago (September 2018)
- Workshop: "Navigating the HathiTrust Repositories", Research Computing Center, University of Chicago (August 2018)
- Workshop: "Python Programming for Natural Language Processing (NLP) and the Natural Language Toolkit (NLTK)", Research Computing Center, University of Chicago (May 2018)
- Workshop: "Digital Literacy: Introduction to Digital Maps and Data Visualizations", UChicagoGRAD program, University of Chicago (May 2018)
- Workshop: "Digital Literacy: Introduction to Digital Texts, Data Sources and Analytics", UChicagoGRAD program, University of Chicago (May 2018)
- Workshop: "Digital Literacy: Creating a Personal Website and Online Presence", UChicagoGRAD program, University of Chicago (May 2018)
- Workshop: "Introduction to Natural Language Processing (NLP) and the Natural Language Toolkit (NLTK)", Research Computing Center, University of Chicago (March 2018)
- Workshop: "Advanced Interactive Data Visualizations (D3/Javascript)", Research Computing Center, University of Chicago (January 2018)
- Lecture: "Stylometry, K-Means Clustering and Hierarchical Clustering Analyses of Shakespeare, Middleton and 'Sir Thomas More'", English Department, University of Chicago (November 2017)
- Workshop: "Textual Analysis and Visualization Strategies", Research Computing Center, University of Chicago (October 2017)
- Lecture: "Topic Modeling Early English Drama", English Department, University of Chicago (October 2017)
- Lecture: "The Life Cycle of a Digital Humanities Project", Master of Arts Program in the Humanities, University of Chicago (May 2017)

- Panel: "Research Computing's Demand for Humanists, and Vice Versa", Digital Humanities 2017 Conference, McGill University (July 2017)
- Lecture: "The Life Cycle of a Digital Humanities Project", Master of Arts Program in the Humanities, University of Chicago (May 2017)
- Workshop: "Digital Literacy: Introduction to Digital Maps and Data Visualizations", UChicagoGRAD program, University of Chicago (May 2017)
- Workshop: "Digital Literacy: Introduction to Digital Texts, Data Sources and Analytics", UChicagoGRAD program, University of Chicago (April 2017)
- Workshop: "Designing Interactive Data Visualizations (D3/Javascript)", Research Computing Center, University of Chicago (April 2017)
- Workshop: "Digital Literacy: Creating a Personal Website and Online Presence", UChicagoGRAD program, University of Chicago (April 2017)
- Workshop: "Text Analysis and Visualization Strategies for Digital Humanists", Research Computing Center, University of Chicago (February 2017)
- Workshop: "Computational Research Methods: Digital Lexicography, Digital Phonology, Digital Philology", Center for Spatial and Textual Analysis, Stanford University (February 2017)
- Workshop: "Hands-on OCR Training for Historians", Department of History and the Visual Resources Center, University of Chicago (December 2016)
- Lecture: "Optical Character Recognition (OCR) Strategies for Historians and Historiography", Department of History, University of Chicago (November 2016)
- Workshop: "Data Visualization and Interactivity", Computation Institute, University of Chicago (November 2016)
- Lecture: "Premodern Chinese Digital Phonology and Philology", Department of Comparative Literature, University of Chicago (November 2016)
- Lecture: "Digital History and Historiography", Department of History, University of Chicago (October 2016)
- Workshop: "Data Visualization Strategies and Digital Cartography: D3 (Javascript)", Research Computing Center, University of Chicago (April 2016)
- Lecture: "Introduction to HPC, MPI, Curated Datasets and R for Text Mining", Master of Arts Program in the Humanities, University of Chicago (March 2016)
- Workshop: "Digital Humanities for Historians", Department of History, University of Chicago (February 2016)

### ADDITIONAL TRAINING AND COURSEWORK

- National Taiwan University (Taipei, Taiwan): Dept. of Chinese Literature 中國文學系, February 2005 July 2007 Areas of Study: *The Classic of Poetry* 《詩經》; *The Four Books* (四書); *The Chu Ci* 《楚辭》; Recently Excavated Manuscripts and Early Confucianism (新出土楚簡與戰國儒學上); Chu Bamboo Manuscripts of the Shanghai Museum (上博楚竹書研究). [Duration of each course: one year.]
- National Taiwan Normal University (Taipei, Taiwan): Mandarin Training Center, Aug. 2004 Mar. 2007
  Areas of Study: Advanced Chinese Composition; Literary Works of Eileen Chang 張愛玲; *The King of Go*《棋王》; *Wonders of Ancient & Modern Times*《今古奇觀》; Zhuangzi《莊子》; Chinese Thought and Society 思想與社會; Early Chinese History; Reading Modern Chinese Academic Articles.
- University of Chicago (Chicago, IL), East Asian Languages & Civilizations (Chicago, IL), Sept. 2002 June 2004 Graduate Student at Large, Graham School of Continuing, Liberal, and Prof. Studies (Chicago, IL). Areas of Study: Beginning, Intermediate, Advanced Classical Chinese (文言文); Intermediate, Advanced Modern Chinese (Mandarin 普通話); Early Chinese Philology and Phonology;

Western Zhou Bronze Inscriptions; Early Chinese Redaction Criticism; Sumerian I.

- Western Washington University (Bellingham, WA): China Teaching Program, Summer 1998
  China Teaching Program TEFL/TESL Certificate awarded August 1998.
  Areas of Study: TEFL/TESL; Advanced Modern Chinese (Mandarin 普通話); Chinese History; Chinese Culture.
- Portland Community College (Portland, OR): Chinese Department, Sept. 1997 June 1998 Area of Study: Intermediate Chinese (Mandarin 普通話).
- **Ludwig-Maximilian-Universität München** (Munich, Germany), October 1995 August 1996 Areas of Study: Advanced German (Literature; Composition); Sociology; Immigration Studies; Beginning Chinese (Mandarin 普通話).
- Université de Nancy II, Facultés de Lettres et de Droit (Nancy, France), Sept. 1994 July 1995 Areas of Study: Advanced French (Literature; Composition; Poetics); Linguistics; Human and Economic Geography (at C.U.E.P.); Advanced German (at Goethe Institut, Nancy).
- **Portland State University** (Portland, OR), September 1993 June 1994 Area of Study: Advanced Swedish Language and Literature.

## PREVIOUS WORK EXPERIENCE:

Freelance Translator and Editor (English, Chinese, German, French)

Jan. 2005 – August 2007

 Clients include National Taiwan University; National Taiwan Normal University; National Chengchi University; Institute for Information Industry Taiwan; Peacetime Foundation of Taiwan

Parity Systems, Ltd. (Evanston, IL)

Dec. 1999 – July 2004

Software Engineer

- Designed, developed and administered specialized data-driven applications, including all coding, database structuring, training, technical support, and budgeting for projects
- Windows NT/2000/XP and Linux/Fedora networking; information security

## **OTHER SERVICE**

American Youth Soccer Organization, Head Coach, 8U/10U/12U, 2016-2020 Boy Scouts of America, Cub Scout Troop 3599, Den Leader (Tiger–Webelos II), 2017-2021

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