Eugene Yu Ji

Teaching Fellow in Cognitive Science and the College
Social Sciences Division
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RESEARCH INTERESTS AND METHODS

Primary interests: communicative modeling; behavioral modeling; language and perception; computational social sciences; generative AI

Secondary interests: sociolinguistics and linguistic anthropology; digital humanities

Methods: computational linguistics; dynamical systems; network analysis; machine learning; information theory; field experiment; quantitative methodology; qualitative methodology

EMPLOYMENT

2023.9 - **The University of Chicago, Chicago, IL** *Teaching Fellow in Cognitive Science and the College*

EDUCATION

2023 The University of Chicago, Chicago, IL

Ph.D. in Psychology

Dissertation: "Cognition-driven distributional and dynamic modeling of domain-oriented language variation and evolution"

2014 Temple University, Philadelphia, PA

M.M. in Piano Performance

2012 St. John's College, Santa Fe, NM

B.A. in Liberal Arts (Philosophy, History of Science and Mathematics)

AWARDS AND FELLOWSHIPS

- 2025 Forum for Free Inquiry and Expression Research Grant, UChicago
- 2025 Forum for Free Inquiry and Expression Course Development Grant, UChicago
- 2024 Provost's Global Faculty Research Grant, UChicago
- 2023 American Political Science Association (APSA) Travel Grant
- 2022 William Rainey Harper/Provost Dissertation Fellowship, UChicago By departmental nomination
- 2022 Gumperz Graduate Student Best Paper Prize (Honorable Mention), the Society of Linguistic Anthropology (SLA) of the American Anthropological Association (AAA)
- 2022 Norman H. Anderson Award, Department of Psychology, UChicago

- 2021 Center for International Social Science Research (CISSR) Dissertation Support Award, UChicago
- 2021 John Dewey Lectureship Prize, Department of Psychology, UChicago
- 2021 Norman H. Anderson Award, Department of Psychology, UChicago
- 2017 Graduate Collaboration Grant, Arts, Science & Culture Initiative, UChicago
- 2016 Division of Social Sciences Doctoral Fellowship, UChicago
- 2012 Walter S. Baird Prize for Excellence in Science, Arts or Literature, St. John's College
- 2011 Ariel Summer Internship Award, St. John's College
- 2008 Four-year College Fellowship, St. John's College

PUBLICATIONS AND MANUSCRIPTS

- Ji, Eugene Yu (forthcoming). "Unraveling Authoritarian Reform Strategies: A Metacognitive-Subcognitive Model." (accepted in *American Journal of Political Science AJPS;* Available at *SSRN*: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5143309)
- Ji, Eugene Yu (2025). "A Metasemantic-Metapragmatic Framework for Taxonomizing Multimodal Communicative Alignment." (in review; *ArxivPreprint*: https://www.arxiv.org/pdf/2501.01535)
- Ji, Eugene Yu (2024). "Performing as Ways of Knowing: Projects of Legibility and State Simplification in Postcolonial Hong Kong." *Journal of Linguistic Anthropology* 00 (0): 1–25. https://doi.org/10.1111/jola.12434
- Ji, Eugene Yu (2024). "Large Language Models: A Historical and Socio-cultural Perspective." *Cognitive Science*, 48, e13430. https://doi.org/10.1111/cogs.13430
- Ji, Eugene Yu (2022). "A Cognitively Driven Weighted-entropy Model for Embedding Semantic Categories in Hyperbolic Geometry." *ArxivPreprint*: https://arxiv.org/pdf/2112.06876.pdf
- Ji, Eugene Yu. "Method, Morality, and the Macro-Micro Nexus: Revisiting Simon, Williamson, and North in the History of Economic Thought." (in review in *Journal of the History of Economic Thought*)
- Ji, Eugene Yu. "From Revolution to Development: Chronotope, Recontextualization, and Deng Xiaoping's Southern Tour." (in preparation)
- Ji, Eugene Yu. "A Behavioral- Organizational Approach to Crisis Management in Authoritarian Politics: With Case Studies of Chinese COVID-19 Decision-making." (in preparation)
- Ji. Eugene Yu. "Empowering the Margins: Artistic and Ritual Transformations via Infrastructure in Southwest China's 'Superstar' Schools." (in preparation)

Ji, Eugene Yu. "A Dynamical-Systems Approach to Metapragmatic Awareness of Cross-Generational Lexical Variations." (in preparation)

Ji, Eugene Yu. "Cognitive and Cultural Topology of Linguistic Categories: A Semantic-Pragmatic Metric Approach." (in preparation)

Chen, Liu & Eugene Yu Ji. "Modeling The Genre-Footprint of Mid-to-Late Tang Chinese Literati." (in preparation)

Ji, Eugene Yu. "Medium Specificity and Recursive Embodiment in Shitao (1642 -1707)'s Daoist Paintings." (in preparation)

ONGOING RESEARCH PROJECTS

Modeling the olfactory lexicon in hyperbolic space (w/ Leslie Kay)

Extending the dual-route model in psycholinguistics via the concepts of co-occurrence gradient and co-occurrence directionality; testing co-occurrence gradient and directionality in cognitive and neuro-linguistic experiments (w/ Yunsong Li)

Investigating the commitment problem in LLMs' alignment (w/ Xiaoyu Ke & Yang Shen)

Metacognitive and metalinguistic interventions to children in extreme poverty in Southwest China and refugee teens in Southeast Asia (w/ Yuhao Zhuang, Marieke Huysentruyt, & the Peach Foundation)

Modeling the literati culture and communication network in the Northern Song Dynasty (960 - 1127) (w/ Chen Liu)

SELECTED TALKS AND PRESENTATIONS

- 4.2025 The 81th Midwest Political Science Association (MPSA) Annual Conference, Chicago "From Revolution to Development: Chronotope, Recontextualization, and Deng Xiaoping's Southern Tour"
- 4.2025 **The 235th Meeting of American Oriental Society, Boston** "Metalinguistic diachronic dynamics in color, smell, shape-related lexicons in medieval classical Chinese poetry"
- 11.2024 Australian Anthropological Society Annual Conference, Perth, Australia (Online) "Empowering the margins: Artistic and ritual transformations via infrastructure in Southwest China's 'superstar' schools "
- 10.2024 The 16th International Conference on Tang-Dynasty Culture, National Chung Cheng University, Taiwan (Online) "Modeling the 'genre-footprint' of mid-to-late Tang Chinese literati" (w/ Chen Liu)

- 10.2024 **Social Science History Association Annual Conference, Toronto, Canada -** "From revolution to development: Chronotype, metapragmatics, and Deng Xiaoping's southern tour"
- 9.2024 Invited Talk, Diligentia College, The Chinese University of Hong Kong, Shenzhen "Brushstrokes & bytes: From AI paintings to AI"
- 9.2024 Invited Talk, Department of Chinese Studies, National University of Singapore "Multimodal and middle-level modeling approaches to Ancient Chinese poetry and politico-religious history"
- 8.2024 China Artificial Intelligence Society Annual Meeting, Harbin, China "Agency and creativity in computational humanities: with AI-aided music performance as a case study"
- 5.2024 Workshop on Ethics of Commitment: Vows and Endurance in a Precarious World,
 Department of Sociology, Zhejiang University, Hangzhou, China (Online) "Commitment as promise, forgiveness, and speech act in the era of AI"
- 5.2024 The LEAP workshop, Department of Linguistics, University of Chicago "Two models of metalinguistics"
- 4.2024 The 80th Midwest Political Science Association (MPSA) Annual Conference, Chicago "A Behavioral organizational approach to crisis management in authoritarian politics: With case studies of Chinese COVID-19 decision-making"
- 2.2024 Invited Talk, Linguistic Anthropology Workshop, University of Chicago "Generative AI and its discontents: metalinguistic alignment, multimodal generality, and data inequality"
- 11.2023 **Invited Talk, Cognitive Science Student Society, University of Chicago -** "Brushstrokes & Bytes: A whimsical dive into art, culture, and AI shenanigans"
- 9.2023 Workshop on Epistemology & AI of Zhejiang University Logic and AI Summit 2023, Hangzhou, China (Online) "Making large language models trustworthy: a deeper examination of alignment and misalignment" (w/ Yang Shen and Xiaoyu Ke)
- 9.2023 The 119th American Political Science Association (APSA) Annual Conference, Los Angeles "A 'behavioral-organizational' approach to risk, attention, and decision-making in Chinese COVID-19 pandemic"
- 6.2023 The 9th Chinese Buddhism & Sheng Yen International Conference, Taipei (Online) "Cultivation at the tip of the nose: Examining the relationships between Chan, incense, and poetry in the Northern Song Buddhist tradition through contemporary psychology and philosophy of perception"

- 5.2023 The 24rd Annual Michicagoan Linguistic Anthropology Conference, University of Chicago "Memorials, chronotopes, and quantifiers: a socio-semiotic approach to public and hidden transcripts in Chinese zero-COVID lockdown"
- 5.2023 **2023 Kellogg-Booth Symposium, Chicago** "A metacognitive model of decision-making in state-led reform via dynamical systems"
- 4.2023 The 80th Midwest Political Science Association (MPSA) Annual Conference, Chicago "A metacognitive model of decision-making in state-led reform via dynamical systems"
- 3.2023 Cognition Workshop, Department of Psychology, University of Chicago "A metacognitive model of decision-making in state-led reform via dynamical systems"
- 11.2022 Gumperz Best Paper Prize Panel, American Anthropology Association (AAA) Annual Meeting, Seattle "How does the state imagine? Two socio-semiotic models of state governance in Hong Kong in the 2000s"
- 7.2022 The 9th Language, Culture, and Mind International Conference, University of Almería, Spain (Online) "Applying the popularity- similarity tradeoff framework to model the evolution of basic color and smell naming in ancient Chinese poetry data"
- 5.2022 The 23rd Annual Michicagoan Linguistic Anthropology Conference, University of Michigan "How does the state imagine? Two socio-semiotic models of state governance in Hong Kong in the 2000s"
- 4.2022 The 2nd Lauren Berlant Conference, The Chicago Center for Contemporary Theory "Numbers, Perceptions, Lives: a Psychopolitical Reflection on the Scientific Public Discourse during the COVID-19 Pandemic"
- 4.2022 **Institute for Mind and Biology Proseminar, The University of Chicago -** "Applying the weighted-entropy model to investigate the evolution of basic color and smell naming in ancient Chinese"
- 11.2021 Center for International Social Science Research (CISSR), The University of Chicago "Measuring the language-culture nexus"
- 7.2021 **Invited Discussant, the OCAT Research Center, Beijing (Online) -** with curators and artists for the OCAT exhibition "Go, A Contemporary Art Research Experiment From Wu Qingyuan to AlphaGo"
- 6.2021 **Symposium: The lives and afterlives, The Smart Museum, Chicago (Online) -** "The Art of Smell and the Smell of Arts: Trans-modality of the Incense Burners in Song-Dynasty China"

- 9.2020 **Swarm Club Annual Academic Conference, Beijing (Online) -** "A new metric of generating topology of multiword expressions (MWEs) in natural language"
- 5.2020 **Institute for Mind and Biology Proseminar, The University of Chicago -** "More is the same: a new metric of generating topology of multiword co-occurrences in natural language"
- 6.2019 Invited talk, Chinese Society of Music Performance Theory, Beijing (declined) Invited talk on music performance, mind & artificial intelligence; declined due to a visa problem
- 5.2018 **Institute for Mind and Biology Proseminar, The University of Chicago -** "The odor naming difficulty: observations from Chinese odor words"
- 9.2017 Annual meeting, Grant, Arts, Science & Culture Initiative, The University of Chicago "Unfolding dimensionality" (collab. w/ two grad students in anthropology and photography)
- 8.2013 Invited Talk, The Sixth Chinese Liberal Education Forum, Peking University, Beijing
 "Liberal arts education in the United States"
- 8.2013 Invited Seminar Leader, The Sixth Chinese Liberal Education Forum, Peking
 University, Beijing Seminar leaders on works by Jean-Jacques Rousseau and Raymond
 Williams

TEACHING EXPERIENCES

- 2025 Instructor, Language in Culture in the Technological Era
- 2024 Instructor, Artificial Intelligence, Human Condition, Human Capacities
- 2024 Instructor, Cognitive Models
- Instructor, Perspectives on Large Language Models: Computational, Cognitive, Social (Course blog: https://voices.uchicago.edu/202304cogs20100/)
- 2022 Instructor, Historical and Contemporary Approaches to the Cognitive Sciences
- 2022 Discussion section leader, Mind, Brain and Meaning (Philosophy and Psychology)
- 2020 Discussion section leader, Sensation and Perception
- 2019 Teaching assistant, Psychological Research Methods
- 2019 Teaching assistant, Cognitive Psychology
- 2018 Teaching assistant, Biological Psychology
- 2014 Teaching Assistant, Secondary Piano for Music Majors (at Temple University)
- 2012 Junior Math and Science Tutor (St. John's College)

ADDITIONAL TRAINING

2013 Linguistic Society of America (LSA) Summer Institute, The University of Michigan

LANGUAGES

Kunminghua (native), Mandarin (native), English (fluent), French (intermediate), Japanese (elementary), Cantonese (intermediate), Burmese (elementary)

PROGRAMMING SKILLS

Python, Matlab, R, HTML, C

CREATIVE AND PUBLIC WRITINGS

English poems collection "If a Hippo Swallows Democracy" (in preparation)

Third Round, 2017 China National Short Poem Competition (200 out of 23,000 participants)

"Going beyond the boundaries: The sciences and humanities education at the University of Chicago" (In Chinese), *Pengpai (The Paper)*, April 29, 2021.

"Socially vulnerable groups in COVID-19 pandemic: Lessons from 2009 H1N1 Pandemic" (In Chinese), *Pengpai (The Paper)*, February 12, 2021.

OTHER ACTIVITIES

Public Lecture on AI for High School Students in Extreme Poverty in Southwest China (July 2024), Dehong, Yunnan, China

Volunteer Teacher, Peach Foundation (July 2023, July 2024)

Taught Chinese, English, and Music to high school students in extreme poverty in Yunnan, China and Burmese refugee children in Mae Sot, Thailand.

Sponsorship Program, Peach Foundation (2018 -)

Supporting students in extreme poverty in Yunnan Province of China for finishing high school

Performance Program (Piano), Department of Music, University of Chicago (2015-2019)