

MEMBERS

Center Director

Jun'ichi SAKUMA

Center Director, Professor / Concurrent

Linguistics. Syntactic research of the relationship between information structure and syntactic phenomena such as word order in Finnish and Estonian.

Research Strategy Division

Yukinori KAWAE

Professor / Full-time

Egyptian archaeology focusing on pyramid analysis using 3D survey and AI, and Old Kingdom settlement excavations on state organization.

Masanobu SAKAMOTO

Professor / Full-time

Lesson Analysis, Development of the method and the software for analysis, Teachers' Pedagogical Skills as Vocational Education

Mayu URATA

Associate Professor / Concurrent

Primary Affiliation: Graduate School of Informatics

Designing livable and inclusive communities through digital technologies, specializing in Information Society Design and Social/Tourism Informatics.

Shuya HAYASHI

Professor / Concurrent

Primary Affiliation: Graduate School of Law

Law, Economic law and Information law. Conducting research on domestic and international digital policy from a legal perspective. Currently serving as a Research Principal at the Japan Society for the Promotion of Science's Centre for Academic System Research, involved in academic promotion policy overall.

Yukiko KAWAMOTO

Associate Professor / Full-time

Classics, Ancient History, and Architectural History. Cultural representations in late Republican to early Imperial period through texts.

Tadashi SONODA

Professor / Full-time

Empirical analysis of farm household behavior, productivity analysis of agriculture and manufacturing sectors, and microeconometrics methods related to these topics

Masakazu SOMEYA

Professor / Concurrent

Primary Affiliation: Graduate School of International Development

Dynamic Stochastic General Equilibrium model analysis on monetary and fiscal policy in developing countries of Middle East.

Yoshitaka HIBI

Professor / Concurrent

Primary Affiliation: Graduate School of Humanities

Modern Japanese literature. Immigrant literature. Print culture. Literary studies and cultural criticism in the context of digital humanities.

Research Project Division

Naoya IWATA

Associate Professor / Full-time

Ancient Western philosophy, Plato and Aristotle. Classical thought research using AI and digital methods for new humanistic insights.

Towa SUDA

Specially Appointed Associate Professor / Full-time

20th-century French literature, Pierre Klossowski. Literary/philosophical research with Informatics, and applying humanities/social science knowledge for technology.

Haruhiko MITSUNAGA

Associate Professor / Concurrent

Primary Affiliation: Graduate School of Education and Human Development

Educational Measurement and Psychometrics. Practical research on applying data-analytic method to administrate large-scale assessment programs for educational and psychological backgrounds.

Tomoya SANO

Lecturer / Full-time

Legal Informatics and Digital Archives. Application of Informatics to legal database construction and legislative history research.

Yoshinori KIGOSHI

Professor / Concurrent

Primary Affiliation: Graduate School of Economics

My field of specialization is Asian economic history. I approach the economic development of Asia from the 19th century to the early 20th century through the perspectives of trade and maritime transport.

Koji MIWA

Associate Professor / Concurrent

Primary Affiliation: Graduate School of Humanities

Psycholinguistics, Word recognition, Bilingual language processing, Eye-tracking, Writing system

Tomoki IKOMA

Academic Specialist

Acquisition and leveraging of digital academic resources such as scholarly documents, databases, tools, software and catalogs of resources.

Asuka YANAI

Administrative Assistant



Digital ×
Humanities
and Social Sciences:

Pioneering a New Era of Knowledge

Nagoya University
Center for Digital Humanities
and Social Sciences

CENTER FOR DIGITAL HUMANITIES AND SOCIAL SCIENCES

Law and Economics common building 1F,
Furo-cho, Chikusa-ku, Nagoya-shi, Aichi 464-8601, Japan
Main Phone Number: 052-789-2369

<https://dhss.nagoya-u.ac.jp/en/>



Toward an Open Convergence of Knowledge

The Vision of the Center for Digital Humanities and Social Sciences

The Center for Digital Humanities and Social Sciences at Nagoya University was established in 2024. What are the keys to enabling digital humanities and social sciences research to contribute to society? We spoke with Professor Jun'ichi Sakuma, Director of the Center.

Director Jun'ichi Sakuma



The Purpose and Plan Behind the Center's Establishment

Given Nagoya University's location in Japan, a major industrial cluster, research in science and engineering, particularly studies connected to industry, tends to attract considerable attention. Against this backdrop, our starting point was to enhance research capabilities in the humanities and social sciences—not merely at the individual faculty level, but by creating a framework that enables collaborative research across Nagoya University's five graduate schools in these fields.

Our aim is to transcend departmental silos and connect disciplines horizontally—integrating them with science, engineering, and industry by leveraging digital data. Put simply, we are building an organization centered on digital humanities and social sciences—an expansion of Digital Human-



ities (DH)—that connects not only with science and engineering but also leads to social implementation, the practical application of research in society.

The objective is to establish a broader and more robust organizational research foundation through the Center, going beyond individual faculty collaborations. Our initial plan spans five years. Having started in 2024, we are working to produce concrete results by the end of fiscal year 2028.

Research utilizing digital data is already

actively pursued among humanities and social sciences faculty. However, when conducted individually, such efforts remain largely invisible from the outside, making it difficult to achieve the larger goal of strengthening research capabilities in the humanities and social sciences.

While DH traditionally refers to the humanities, our Center employs the term "digital humanities and social sciences" to encompass the social sciences—law, economics, education, and so forth. Though we envision collaboration with science and engineering fields, the immediate necessity is for the humanities and social sciences to collaborate with one another. Cross-disciplinary research utilizing digital data holds great promise, but truly interdisciplinary work is far from straightforward. The very attempt to advocate for and advance the integrated research domain of digital humanities and social sciences represents an endeavor unprecedented not only in Japan but internationally. We want our Center to function as a venue for this endeavor.

The establishment of the Center has enabled frequent cross-departmental meetings and created daily opportunities for informal and candid exchanges beyond formal meetings. Discussions are vigorous not only about individual research projects but also on broader questions such as "What can digital humanities and social sciences accomplish?" and "How can we connect with society?" Such developments can't succeed through top-down mandates. We actively incorporate the free ideas of faculty from different departments and engage scholars outside the Center, including those from other institutions. Rather than remaining insular, we cultivate projects that extend outward.

What Can Digital Humanities and Social Sciences Accomplish?

Let me offer a concrete example of how my own field, linguistics, approaches the currently flourishing domain of Digital Humanities. Linguistics primarily handles textual data. Because textual data is easily digitized, research utilizing digital data has advanced relatively early through the construction of linguistic corpora. While linguistics seeks to clarify principles common to all the world's languages, the availability of large-scale digital data has become a powerful tool.

Linguistics is not alone in its interest in language. Natural language processing research has also progressed vigorously in the field of information engineering. Here lies the intersection between linguistics and information engineering. However, Chomsky, who led linguistics from the latter half of the 20th century onward, and information engineering researchers have not necessarily shared the same orientation. As a result, the human linguistic competence Chomsky envisioned differs from the LLMs that underpin AI.

It's undeniable that LLMs and AI have evolved rapidly. This evolution may have exceeded the imagination not only of linguists but also of information engineering researchers. At the very least, linguists find themselves perplexed when confronted with AI that commands language with such ease. How should we engage with the situation where AI, evolving beyond human imagination, is being implemented in society?

This goes beyond linguistics. We can't ignore such highly developed AI, but multifaceted discussion is necessary regarding the relationship between humans and AI. Researchers from various humanities and social sciences fields can contribute to this

discussion. What's more, this provides an opportunity for different humanities and social sciences disciplines to converge and creates engagement with social issues. For example, the Center's Humanitext Project, which envisions collaboration across multiple fields, addresses the problem of AI-generated disinformation.

Of course, AI-related issues are not the only areas where humanities and social sciences research intersects with social challenges. The digital data handled by digital humanities and social sciences extends beyond textual data. Whether numerical, image, or audio—all digitized data falls within our scope, and the Digital Heritage Project handles three-dimensional data. Actively working with data beyond text is one of our Center's distinctive features, and we believe that handling diverse data types brings diversity to both inter-field collaboration and approaches to social issues.

Communication from the Center as the Key to Social Implementation

Our Center places importance on the relationship between humanities and social sciences research and real-world society. However, research outcomes in these fields don't necessarily lead immediately to social contribution or resolution of social issues. The relationship between humanities and social sciences research and society is far more complex and not always transparent. Yet precisely because of this complexity, what researchers themselves may not have considered useful might actually prove interesting or applicable to society.

Of course, such possibilities won't emerge if the nature of the research remains unknown, so maintaining an open research environment is crucial. This requires active communication, building connections, and using those as springboards to expand relationships further. Beyond individual faculty collaborations within the Center, we aim to strengthen communication as an organization, thereby creating an environment for institutional collaboration.

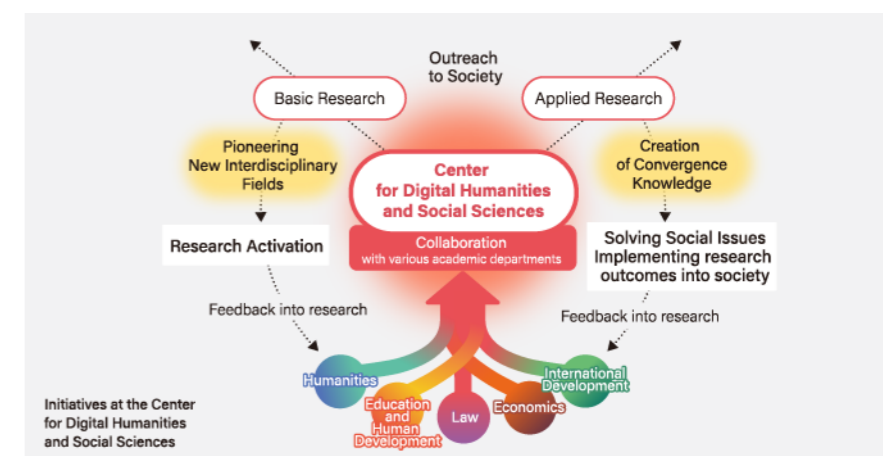
To Students

In terms of opening up and expanding, while collaboration with established researchers—Center faculty and scholars



Enhancing Outreach & Hosting Events

The Center actively organizes symposiums, research seminars, lunchtime seminars, co-hosted events, and workshops. Starting in 2025, we are launching the "DHSS Colloquium," an open discussion-based event. Selected past events are available on the DHSS YouTube channel. Latest updates are available on the Center's website.



both within and outside the university—naturally forms the foundation, we also want to include students aspiring to become researchers in this circle. The development of digital humanities and social sciences as a new academic field requires the free thinking of young students.

With this in mind, the Center has launched the "Digital Humanities and Social Sciences Education Program" for graduate students. We also actively organize events in which students can participate, and we sincerely hope many graduate students will join us.

Toward an Open Center

To emphasize this point again, the Center must remain open to fulfill its founding purpose. It's crucial that the Center serves as a venue where people from various fields can exchange ideas on a daily basis.

We have already received several inquiries regarding collaboration with industry. Among corporate representatives, recognition is spreading that future technological development must incorporate knowledge from the humanities and social sciences. We'd like to discuss together how to utilize humanities and social sciences knowledge at the intersection of technological development and industry.

The essence of digital humanities and social sciences lies in the expansion of central paradigms of humanities and social sciences knowledge through digital data. Through collaboration with diverse academic domains, including science and engineering, and engagement with society and industry, the Center aims to achieve social implementation of humanities and

social sciences knowledge—a new form of knowledge. Various cross-departmental research initiatives have already begun, such as collaboration between law and information science regarding legal databases, and cooperation between history and natural sciences concerning auroral records in historical documents. Going forward, we anticipate even more interdisciplinary research.

Since research methodologies differ between the humanities and social sciences, collaboration between these two fields



alone represents a challenging endeavor when we speak of digital humanities and social sciences. However, we aim to go even further. Through sustained discussion, we wish to propose concrete models for new interdisciplinary research centered on the humanities and social sciences. By actively disseminating these results, we will connect them to industry-academia collaboration, resolution of social issues, and social implementation of humanities and social sciences knowledge. Through these active efforts, the Center for Digital Humanities and Social Sciences aims to establish itself as an advanced research hub for the humanities and social sciences befitting the new era.