Universal Communication Research Institute
Advanced Speech Translation Research and Development Promotion Center

3-5, Hikaridai, Seika-cho, Soraku-gun, Kyoto, 619-0289 Japan

Access by Train
At Hosono Stn. (H20) on the JR Gakken-Toshi Line, or Shin-Hosono Stn. (B21) on the Kintetsu Kyoto Line,
  - Take Nara-Kotsu Bus #58 for "Hikaridai Loop Line", #48 for "Hikaridai Sanchome", or #58 bound for "Gakken Nara Tomigaoka Stn." and get off at "Hikaridai Sanchome" station. The bus ride will take about 15 minutes, and the building is across the road from the bus stop. Alternatively, get off the #58 or #59 bus at "Keihanna Plaza" and walk for six minutes.

At Gakken Nara Tomigaoka Stn. (C30) on the Kintetsu Keihanna Line,
  - Take Nara-Kotsu Bus #56 bound for "Hosono Stn." and get off at "Hikaridai Sanchome" (bus stops in front of the building), or take #58 bound for "Hosono Stn." and get off at "Keihanna Plaza" and walk for six minutes. Either bus ride will take about 15 minutes.

Access by Car
Hanashin Expressway #13, Higashi-Osaka Route → Daimini-Hanna Road → Nakahara Ramp → via Gakken University → via Tomigaoka

From Shin-Meishin Expressway(E1A)

Seika-Odori Line

From Nara Seika Line

Access by Highway Bus
There are buses traveling directly to Keihanna Plaza from Kansai International Airport and Kansai International Airport Express Bus Station.

Access by Train
From JR Kukunji Station
  - Tohokuketsu Bus (North Exit)
    Get off at "Kukunji Taito-kaido" bus stop
  - Tohoku Express Bus (North Exit)
    Bound for Kodaiai Stn. South Exit. Get off at "Sanejo-don" bus stop in front of NICT.

From JR Musashi-Koganei Stn.
  - Keio Bus (South Exit) Bay 1
    Bound for Kodaiai Dancho. Get off at "Jouhou-Tsushin-Kenkyuu-Kikou-Mae" bus stop (approx. 15 minutes), 2-minute walk from bus stop.

From Kodaiai Stn. on Seibu Shinjuku Line
  - Ginga Tetsudo Bus (South Exit)
    Bound for Kukunji Station Entrance. Get off at "Sanejo-don" (approx. 15 minutes), Bus stops in front of NICT.

National Institute of Information and Communications Technology (HQ)
4-2-1 Nukui-Kita-machi, Koganei, Tokyo 184-8795, Japan

URL: http://www.nict.go.jp/

For inquiries regarding NICT, please contact the Public Relations Dept.
Tel: (042)327-5392  Fax: (042)327-7587
E-mail: publicity@nict.go.jp
Greetings

Means of communication have diversified in recent years as our society has become global and is becoming multicultural. Communication technologies—the infrastructure of communications—continue to evolve and with IoT (Internet of Things) allowing all “things” to be connected, the boundary between cyberspace and physical space is becoming less noticeable. New values can be created by analyzing massive and diverse information (big data) from both spaces using artificial intelligence (AI). However, while this has demonstrated possibilities in resolving some of the social issues such as language barriers and shortage of labor due to the declining birthrate and the aging society, we still face many challenges in finding truly valuable information from big data, establishing mutual understanding by taking advantage of such information, and taking the right actions in a society where different cultures coexist.

The Universal Communication Research Institute (UCRI) has been conducting research and development (R&D) on speech-to-speech translation and information analysis technologies, as well as real-space information analytics based on big data, etc., with the aim to achieve universal communication; finding, creating, and using valuable information, and establishing mutual understanding among the people. Since 2015, we have been promoting R&D on social knowledge analysis using AI, such as natural language processing and deep learning, to analyze large amounts of text on a semantic level and generate valuable combinations of information and hypotheses. We have also been focusing on information services platform technologies by taking advantage of IoT, utilizing widely varied sensor information as well as image and video data from various fields. The results of these R&D have been implemented into practical systems or made into databases and released to the public as open source or via industry-government-academia collaboration projects such as “Advanced Language Information Forum (ALAGIN)”. We also conduct joint field experiments with private companies to further promote social implementation of our R&D outcomes.

Organization

Universal Communication Research Institute

Planning Office (Keihanna, HQ)

Data-driven Intelligent System Research Center (Keihanna)

Information Services Platform Laboratory (HQ)

*Research Promotion Council of Keihanna Info-Communication Open Laboratory

The purpose of this Council is to use the Keihanna Info-Communication Open Laboratory and to build effective collaborations in relevant fields with government, industry, and academia, including universities, communications carriers, broadcasters, manufacturers, research institutes, venture companies, and regional municipalities, to create new info-communication related services and industries originating in the Kansai area, and at the same time contribute to human resource development.


*Advanced Language Information Forum (ALAGIN)

The goal of this Forum is the deployment and dissemination, as well as the further advancement of research and development, of “super communication technologies” that will realize communication that eliminates a sense of the “barriers” of language. It targets technologies that will overcome language barriers, which separates humans from other humans and humans from machines, and the barriers of the quality and quantity of information on the Internet. It will pursue this goal by promoting collaborations with government, industry, and academia.

https://www.alagin.jp/index-e.html

In this increasingly complex global society, there are frequent examples in which unforeseen connections between seemingly unrelated information have brought about grave consequences. The Data-driven Intelligent System Research Center (DIRECT) conducts research and development into simple, user-friendly systems for obtaining these kinds of combinations of information, and massive language databases to support such technology. More specifically, DIRECT develops technologies for conducting deep analysis of massive volumes of data on a semantic level and technologies for discovering valuable combinations of the information thus obtained and hypotheses based on that information. The large-scale Web information analysis system, WISDOM X, applies the technologies described above to more than 4 billion web pages, to postulate answers and hypotheses to the questions of “what,” “why,” and “what will happen.” The DISASTER-information ANALYZER, DISAANA (a collaboration with the Resilient ICT Research Center) conducts real-time analysis of information related to disasters posted on social networking services. It has actually been used to collect information and ascertain the situation during large-scale disasters.

Data-driven Intelligent System Research Center (DIRECT)

http://wisdom-nict.jp/

Information Services Platform Laboratory

The Information Services Platform Laboratory conducts research and development of data collection and analysis technologies to appropriately collect and analyze real-space information connected closely to social life, such as torrential rains and environmental change, and to provide a platform for the use of information that is effective in social life. It also conducts research and development of data mining technologies that, through the cross-domain integration and correlation analysis of environmental data with a variety of social data, can analyze as model cases the concrete impacts on the transport and other social systems. Further, through the research and development of methods for feeding back the results of such analysis into sensors and devices, as a mechanism for making use of those results in real space, and of the state of effective sensor technology, the Laboratory is developing and trialing systems with the aim of creating basic technologies to realize systems for advanced situation awareness and behavior support, with the goals of optimizing and improving efficiency of social systems.

http://disaana.jp/