

Access

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



3-5, Hikaridai, Seika-cho, Soraku-gun, Kyoto, 619-0289 Japan
TEL : 0774-98-6300 FAX : 0774-98-6955

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 #36 for "Hikaridai Loop Line", #46 for "Hikaridai Sanchohome", or #56 bound for "Gakken Nara Tomigaoka Stn." and get off at "Hikaridai Sanchohome" stop. 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 Yonchohome" (bus stops in front of the building), or take #59 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

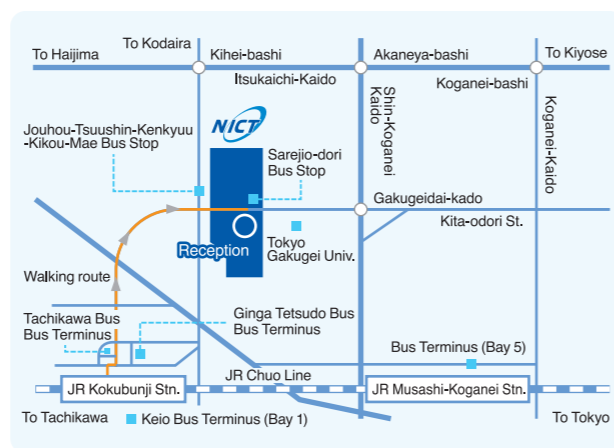
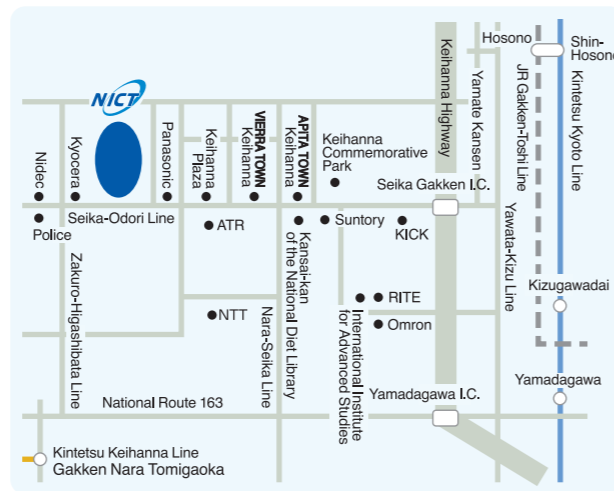
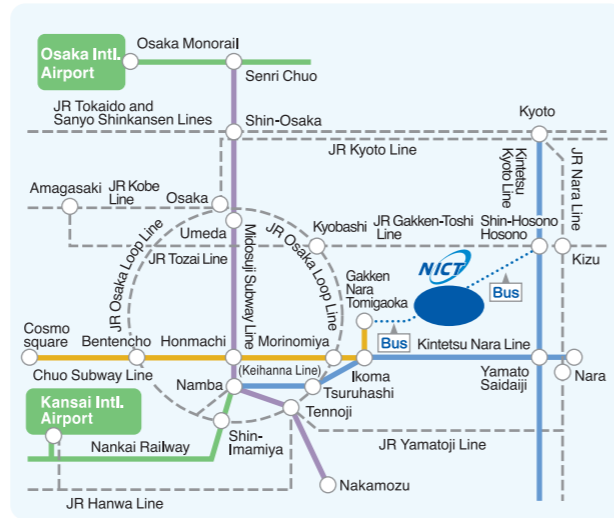
From Osaka Hanshin Expressway #13, Higashi-Osaka Route → Daini Hanna Road(E92) → Nakamachi Ramp → via Gakuenmae → via Tomigaoka

From Kyoto Hanshin Expressway #8, Kyoto Route → Daini Keihan Road(E89) → Shin-Meishin Expressway(E1A) → Keinawa Highway(E24) → Seika-Gakken I.C. → Seika-Odori Road

From Nara Narayama-Odori Road → Nara-Seika Line

Access by Highway Bus

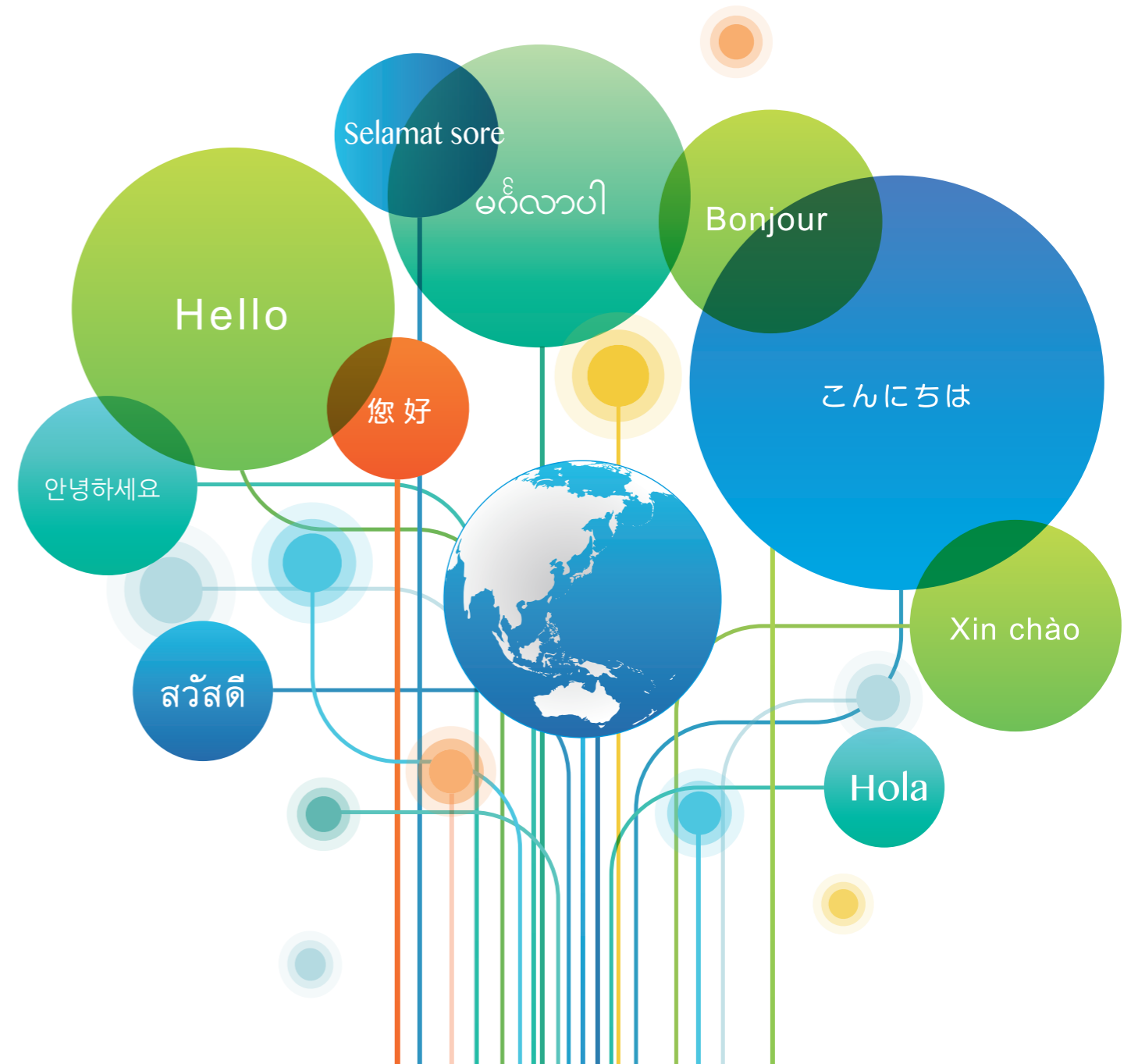
There are buses traveling directly to Keihanna Plaza from Kansai International Airport and Kyoto Station Hachijo Exit (trial basis).



**Advanced Speech Translation Research and
Development Promotion Center**

National Institute of Information and Communications Technology (NICT),
National Research and Development Agency

<http://astrec.nict.go.jp/>



NICT Headquarters

Access by Train

From JR Kokubunji Station *All buses take about 10 minutes.

■ Tachikawa Bus (North Exit)
Get off at "Jouhou-Tsuushin-Kenkyuu-Kikou-Mae." 2-minute walk from bus stop.

■ Ginga Tetsudo Bus (North Exit)
Bound for Kodaira Stn. South Exit. Get off at "Sarejio-douri." Bus stops in front of NICT.

■ Keio Bus (South Exit) Bay 1
Bound for Kodaira Danchi. Get off at "Jouhou-Tsuushin-Kenkyuu-Kikou-Mae." 2-minute walk from bus stop.

From JR Musashi-Koganei Stn.

■ Keio Bus (North Exit) Bay 5
Bound for Kodaira Danchi. Get off at "Jouhou-Tsuushin-Kenkyuu-Kikou-Mae" (approx. 15 minutes). 2-minute walk from bus stop.

From Kodaira Stn. On Seibu Shinjuku Line

■ Ginga Tetsudo Bus (South Exit)
Bound for Kokubunji Station Entrance. Get off at "Sarejio-douri" (approx. 15 minutes). Bus stops in front of NICT.

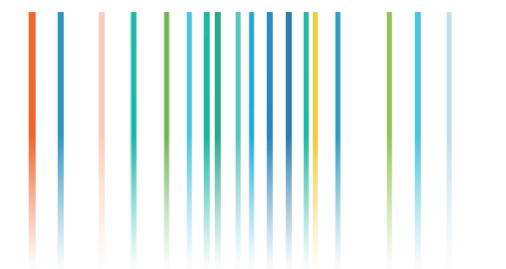


National Institute of Information and Communications Technology (HQ)

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

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Breaking Down the Language Barrier



Message from the Director General

A society in which the people of the world can all communicate with each other without worrying about differences in languages or abilities, without the barrier of language, has long been a great dream of the human race. Japan has been pursuing the national project, Global Communication Plan, since 2014, with the aim of realizing a society without language barriers. The Advanced Speech Translation Research and Development Center (ASTREC) was established as a research hub that would play a central role in research and development under this Plan. ASTREC is pursuing R&D with an "all-Japan" line-up of researchers from government, industry and academia, the goal of which is to develop highly practical multilingual speech translation technologies that can be used on public transport such as trains, in shopping facilities, at tourist spots, and in healthcare settings by the year 2020, as well as technologies for multilingual text translation technologies to enable companies to machine-translate patents from other countries. Through the activities of the Global Communication Development Promotion Council, the outcomes of these research and development activities, which are the fruit of industry-academia-government collaboration, are being widely disseminated throughout society.



Dr. Yutaka Kidawara,
Director General

Organization

Advanced Speech Translation Research and Development Promotion Center

- Planning Office (HQ, Keihanna)
- Advanced Speech Technology Laboratory (Keihanna)
- Advanced Translation Technology Laboratory (Keihanna)
- System Development Office (Keihanna)



Deploying Research Outcomes in Society (System Development Office and Planning Office)



VoiceTra® <http://voicetra.nict.go.jp/en/>

Speech translation app that translates spoken words into other languages.



KoeTra <http://www.koetra.jp/en/>

An app that facilitates communication between hearing-impaired people and people with normal hearing.



SpeechCanvas® <http://speechcanvas.jp/>

Convenient app to assist with communication with hearing-impaired people at counters, etc.

The System Development Office is engaged in the establishment of platforms for the implementation in society of speech translation systems and the development of various spoken communication applications.

The Planning Office manages the secretariat of the Global Communication Development Promotion Council*, which was established with the aim of contributing to the promotion of the Global Communication Plan. It brings together the capabilities of government, industry and academia, with a focus on the Council members, to improve the accuracy of multilingual speech translation technologies, and to consider the deployment of the outcomes of those efforts in various applications.

It is also engaged in the transfer of technology to the private sector.

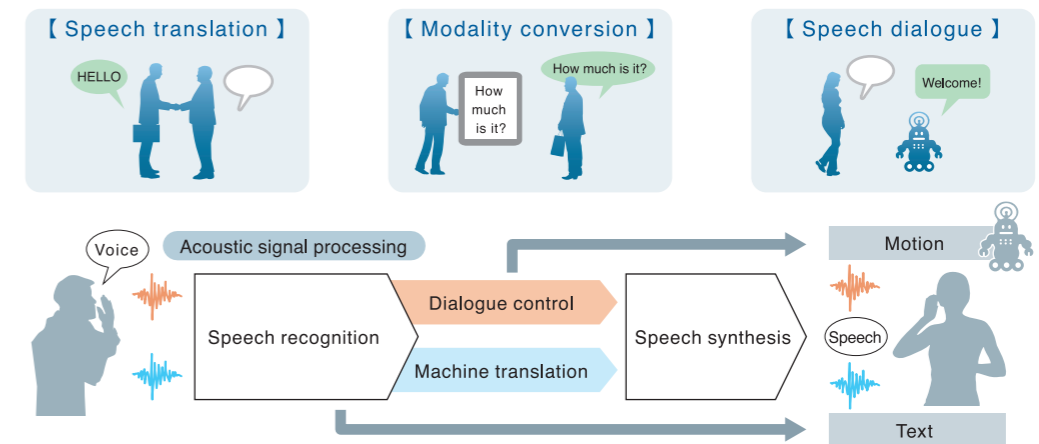


*<http://gcp.nict.go.jp/>

Advanced Speech Technology Laboratory

The Advanced Speech Technology Laboratory will realize practical speech recognition technologies in ten languages (Japanese, English, Chinese, Korean, Thai, Vietnamese, Indonesian, Myanmar, Spanish, and French) with the aim of implementing them in society in 2020. Research and development involved includes (1) building speech corpora of about 2,000 hours in four languages, Japanese, English, Chinese and Korean, and of about 500 hours in the other languages; (2) developing multilingual and multidisciplinary language models; and (3) developing high-speed, high-accuracy speech recognition engines. The Laboratory will also conduct research and development of speech synthesis technologies to realize practical speech synthesis systems in the above ten languages.

In terms of research and development for the world post-2020, the Laboratory will aim to realize technologies for the conversion of all speech contents around the globe into text. It will conduct research and development of technologies for recognizing speech generated by multiple people speaking different languages in environments such as public spaces with background noise and echoing, and technologies for mixed-language dialogue in many languages.



Advanced Translation Technology Laboratory

While conducting research and development of multi-lingual and multi-disciplinary machine translation, the Advanced Translation Technology Laboratory will also concurrently collect large volumes of bilingual data to build highly accurate machine translation systems for use in multiple languages and multiple fields. In particular, to cope with the sharp rise in the number of overseas tourists coming to Japan, the Laboratory will conduct research and development aimed at the implementation in society of practical speech translation systems for areas such as travel, healthcare, and disaster preparation, in the ten languages mentioned above, that can be used in general daily life.

In terms of research and development for the world post-2020, the Laboratory will aim to establish the basic technologies for simultaneous interpreting systems, such as the incrementalization of translation processing. Also, to minimize the dependence on bilingual data that is hindering the universal adoption of machine translation systems, the Laboratory will pursue the research and development of technologies for making use of data in other languages in the same discipline that are not bilingual, and of technologies for reciprocal conversion of synonymous expressions.

Minna no Honyaku

<http://trans-aid.jp/>

Minna no Honyaku (Translation for Everyone) is a website that lets people work together to translate documents from all over the globe. Anyone can translate as much or as little as they are able. Even if one person can manage only a tiny part, the combined efforts of everyone doing their own parts all over the globe will serve to significantly lower the barriers of language. Minna no Honyaku provides the necessary foundations for translation and information about translation to achieve this kind of future.

Minna no Honyaku



Minna no Machine Translation@TexTra

<https://mt-auto-minhon-mlt.ucrj.igj-n-x.jp/>

Minna no Machine Translation@TexTra is a website that allows anyone to help foster machine translation. Users can try out previously registered machine translations, have their own files machine translated, and use the translation editor on the site to translate text themselves.

