Inspiring the future of business, society and people

NEC proudly presents world-leading technologies that deliver new value for people and corporations and inspire you to accelerate your innovations.

Our location

7th Fl., Shinagawa East One Tower 16-1, Konan 2-chome, Minato-ku, Tokyo, Japan
Open 9:00-17:00 (Last admission by 16:00)
NEC Innovation World operates on a reservation-based system.
NEC Innovation World is for corporate visitors only.
We are not open to the general public.

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NEC Innovation World
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Let us embark on a journey to the near-future.

What makes a society “safe”, “secure”, “efficient”, and “fair” where we can live more brightly and prosperously?

Moreover, what can ICT do to achieve these? We will guide you on a journey to the near future that showcases NEC’s advanced technologies such as image analysis and AI.

1 Premium Journey

Walk-through Face Recognition System
The system allows facial authentication while walking, without having to settle in front of the camera, to support public safety at large events.

Gender and Age Auto-Estimation System
The system presumes the person’s gender and age group by instantaneously analyzing the image from the camera, to be used for marketing purposes in a place with many visitors.

Motion Recognition Technology of 3D Objects using a Monocular Camera
This detects vehicles and pedestrians using video analysis, and estimates the distance between objects, to support automatic driving.

Tourist Assistance Services Using AR Technology
An application using Augmented Reality (AR) technology for route guidance and stamp rally to improve customer services.

Interactive Projection System (IPS)
IPS projects virtual space contents to a real space, where we can operate them with our gestures freely, to attract customers and provide a new and unique user experience.

Video Face Authentication and Remote Gaze Estimation
These technologies detect the face of a moving subject in real time, and estimate the direction of the line of sight from a remote place with high accuracy.

Acoustic Situation Awareness (ASA)
This technology lets us understand the current situation by analyzing the surrounding sounds to detect crimes, accidents, and dangerous situations.

Gender and Age Auto-Estimation System
The system presumes the person’s gender and age group by instantaneously analyzing the image from the camera, to be used for marketing purposes in a place with many visitors.

2 Technology Vision

Introduction of NEC technologies that resolve issues by looking at the world a decade ahead

Video Face Authentication and Remote Gaze Estimation
These technologies detect the face of a moving subject in real time, and estimate the direction of the line of sight from a remote place with high accuracy.

miDoT Authentication
This is an emerging technology that uses a handwritten point of only 1mm as a unique identification tag.

Adaptive Video Streaming
This technology optimizes video quality according to the fluctuation of communication speed, to deliver high quality videos in real time.

Olfactory Data Analysis
This is an introduction of NEC’s efforts in recognizing fragrance and odor in order to create new industries and culture.

Next-generation Innovation Platform
This provides a next-generation data platform that corresponds to increasing data and high precision calculation to accelerate industry advancement.

Heterogeneous Mixture Learning
Heterogeneous Mixture Learning discovers massive patterns hidden in big data to automate processes that are important in making accurate forecasts.
Public Safety

Introduction of NEC solutions using AI technologies such as biometrics authentication to ensure security of people and infrastructures.

Security Solutions using Face Recognition

These solutions detect the location of specific persons as well as people’s gazes using face recognition technology to ensure urban safety.

Video Surveillance and Analysis System

This system detects suspicious human behavior and searches persons by feature utilizing NEC’s proprietary image analysis technology, to protect public safety and reduce surveillance staffs’ burden.

Leading-edge Video and Image Analysis

A video animation introducing NEC’s leading-edge video and image analysis system such as license plate recognition, super-resolution technologies, and 3D object recognition to support automatic operation.

Smart Nation

Contributing to the creation of new social values through expanding efficient and safe “smart cities” using AI and IoT

Case Studies: NEC’s Smart Cities

This is an introduction of NEC’s efforts using video analysis, facial authentication, and cloud technology, to solve problems and issues such as traffic congestion and security deterioration due to rapid urbanization.

NEC Advanced Analytics - RAPID Machine Learning

The easy-to-introduce RAPID machine learning supports accurate thinking and decision-making to improve work efficiency by streamlining tasks such as deterioration detection, human resource matching optimization, and failure signs detection.

Failure Sign Detection Solution

This solution analyzes a large amount of sensor information from large facilities such as plants using NEC’s Invariant Analysis technology, an NEC’s proprietary big data analytics technology, to detect equipment failure symptoms and identify anomaly parts.

NEC SDN Solutions

With NEC’s extensive SDN introduction experience, these solutions resolve various ICT issues with flexible and stable networks, to provide new value to customers’ information communication infrastructure.

Cyber Security Solutions of NEC

This is an introduction of some of the cyber security solutions offered by NEC, the Cyber Security Platform that prevents known cyber attacks, and NEC’s proprietary self-learning anomaly detection technology that detects unknown cyber attacks through internal monitoring of the entire system in real time.

Infrastructure Monitoring Solutions of NEC and Water Leak Monitoring Service

Using Synthetic Aperture Radar (SAR), image analysis and other cutting-edge technologies, NEC provides effective and preventive maintenance of infrastructures. In addition, NEC also offers Water Leak Monitoring Service that utilizes vibration sensor and NEC’s cloud.

Emergency Mobile Radio Network based on Software-Defined Radio and All Outdoor Radio System “iPASOLINK”

This is an introduction of NEC’s technologies that support communication infrastructures by creating ad-hoc networks and using wireless communications systems to provide stable and flexible communications.
Value Chain Innovation
Linking MAKE, CARRY, and SELL to offer new values across the entire value chain

Make
Accelerating the digital transformation of manufacturing industries at each operation level such as on-site and factory management

Next-generation Manufacturing Solutions “NEC Industrial IoT”
The next-generation manufacturing solutions “NEC Industrial IoT” creates new business models, ensures revenue sources, maximizes throughput, and improves quality throughout the supply chain.

Throughput Visualization
This lets us visualize the flow and stagnation in manufacturing plants and lines using the management dashboard. This supports rapid decision-making of the management and factory management layers, contributing to supply chain optimization and throughput maximization.

Supply Chain Applications utilizing Fingerprint of Things
Fingerprint of Things Authentication technology recognizes individual items by checking the differences of minute irregularities on the object’s surface. Using this technology for quality control, authenticity judgment, traceability, and parts matching, improves quality, production efficiency, and yield.

On-site Work Support using Voice
This supports paperless work instruction and inspection report by using speech recognition and synthesized speech in real time to improve work efficiency.

Voice of the Customer Analysis Solution
The solution utilizes various AI technologies to visualize and analyze the large volume of customers’ comments and requests collected through on-site shopping, websites, and contact centers in order to improve corporate management and operations.

Carry
Effectively connecting “Make” and “Sell” by optimizing people, goods, vehicles, and locations

AI-SCM Template
This supports optimal production without waste by demand forecast utilizing AI.

Warehouse Worker Allocation Optimization
This distributes the load and optimizes internal work by visualizing the working situation in the warehouse.

Sell
Introducing future attractive stores with efficient store management to support enjoyable shopping experiences

Image Inspection
By combining image recognition technology and weighing scale, this solution automatically inspects the type and quantity of objects to be shipped. This contributes to inspection work efficiency and improvement of shipping quality.

Automatic Identification of Goods
This identifies the type and number of irregular objects whose shape changes in time, such as bento box contents and vegetables. This achieves both work efficiency and quality assurance.

Transportation Delivery Optimization
This grasps the on-site real-time situation using AI and IoT to streamline the delivery process by proposing optimal routes.

Smooth Smart Shopping Experience
This lets us enjoy a pleasant shopping experience using face authentication and image recognition technologies to smoothly complete transactions until payment.

Store Equipment Operation Support
IoT enables the state of the store visible to integrally manage it and achieve an uninterruptible store by analyzing the collected data.

AI/AR Business Support
This supports the resolution of every store’s troubles with automatic response using AI and AR to improve the efficiency of busy employees.

Image Recognition Service “GAZIRU”
This image recognition service accurately recognizes images taken using a mobile device camera and displays corresponding various contents, to serve as new advertising and marketing tools by providing it to end users as an application.

Shinagawa Showroom
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