November 2017 Vol. 15 No. 11
NTT Technical Review 11 2017
https://www.ntt-review.jp/archive/2017/201711.html

Front-line Researchers

Naonori Ueda, NTT Fellow, Head of Ueda Research Laboratory and Director of Machine Learning and Data Science Center, NTT Communication Science Laboratories

▼Overview

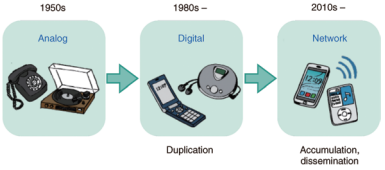
The 2016 White Paper on Information and Communications in Japan issued by the Ministry of Internal Affairs and Communications states that the proactive use of information and communication technology such as the Internet of Things and artificial intelligence has the potential to accelerate economic growth in Japan, and the key to this growth will be the collection and use of big data. Against this background, there are high expectations for research achievements in machine learning. NTT Fellow Naonori Ueda of NTT Communication Science Laboratories has announced a string of Japan-first and world-first achievements in machine learning analysis and technology. We asked him about important aspects of research and his frame of mind as a researcher.

Feature Articles
Communication Science that Enables corevo®—Artificial Intelligence that Gets Closer to People

Basic Research in the Era of Artificial Intelligence, Internet of Things, and Big Data—New Research Design through the Convergence of Science and Engineering

▼Abstract

To build a productive relationship between humans and artificial intelligence (AI), we must grasp the current situation as accurately as possible and make investments in the future toward developing such a relationship. This article introduces how we see and interpret the AI, Internet of Things, and big data era from the standpoint of promoting research and development of basic technologies.



Regular Articles

Optimization of Harvest Time in Microalgae Cultivation Using an Image Processing Algorithm for Color Restoration

▼Abstract

Algae have been attracting attention as a next-generation alternative energy source to fossil fuels, but the high cost of cultivation remains an issue. This article introduces technology that reduces the cultivation cost through the use of an image-processing algorithm for color restoration to quickly determine the optimal time to harvest algae.