

NTT DOCOMO

Technical Journal

Vol.21 No.2 | Oct. 2019

DOCOMO Today

- Intellectual Property Strategy for the Reiwa Era

Technology Reports & Topics (Special Articles)

Special Articles on AI Supporting a Prosperous and Diverse Society

Technology Reports

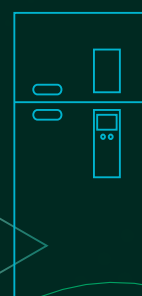
- “Japanese Language Training AI”
Supporting Japanese Conversation Training for Foreigners
- Automatic Domain Prediction in Machine Translation
- Highly Customizable Chat-oriented Dialogue System
- Avoiding Tokyo Bay Aqua Line Congestion Using Traffic
Congestion Forecasting AI
— Prediction Based on Statistical Processing of
Mobile Phone Network Operations Data —

Topics

- A Food Product Judgment System Supporting Food Diversity
— Enabling People Who Have Food and
Drink Prohibitions to Select Foods Simply with an App —

Technology Reports

- The “Office Link Voice Conferencing Service”
— A New Telephone Conferencing System Using the Office
Link Platform —



NTT
docomo

[Contents]

DOCOMO Today

Intellectual Property Strategy for the Reiwa Era
Tadanobu Ando 1



Technology Reports & Topics (Special Articles)

Special Articles on AI Supporting a Prosperous and Diverse Society

Technology Reports

“Japanese Language Training AI” Supporting Japanese Conversation
Training for Foreigners 4

Japanese Training AI

Automatic Domain Prediction in Machine Translation 13

Natural Language Processing Machine Translation Document Classification

Highly Customizable Chat-oriented Dialogue System 20

Dialogue Systems Chat-oriented Dialogue Chatbots

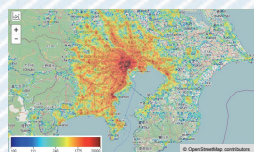
Avoiding Tokyo Bay Aqua Line Congestion Using Traffic Congestion
Forecasting AI —Prediction Based on Statistical Processing of Mobile
Phone Network Operations Data— 27

Real-time Population Statistics Congestion Prediction Machine Learning

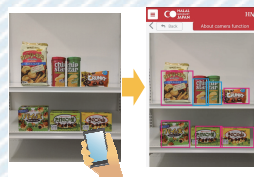
Topics

A Food Product Judgment System Supporting Food Diversity
—Enabling People Who Have Food and Drink Prohibitions to Select
Foods Simply with an App— 36

Image Recognition Specific Object Recognition Food Product Judgment



(P.27)



(P.36)



(P.42)

Technology Reports

The “Office Link Voice Conferencing Service”

—A New Telephone Conferencing System Using the Office Link Platform—

42

Telephone Extension Solution

Telephone Conference Service

Office Link



(P.52)

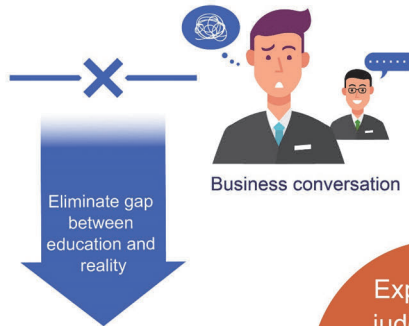
News

NTT Group Receives the “Derwent Top 100 Global Innovators 2018-19” Award

—NTT DOCOMO Activities Contribute to Earning This Award—

52

GOOD DESIGN
AWARD 2018



Pronunciation-
judgment AI
Pronunciation
understandable
by the other
party?

Judgment and advice
by two support
AI functions

Expression-
judgment AI
Appropriate
expression?

Technology Reports (Special Articles) Special Articles on AI Supporting a Prosperous and Diverse Society (P.4)
JLT features

NTT DOCOMO
Technical Journal Vol.21 No.2

Editorship and Publication

NTT DOCOMO Technical Journal is a quarterly journal edited by NTT DOCOMO, INC. and published by The Telecommunications Association.

Editorial Correspondence

NTT DOCOMO Technical Journal Editorial Office
R&D Strategy Department
NTT DOCOMO, INC.
Sanno Park Tower
2-11-1, Nagata-cho, Chiyoda-ku, Tokyo 100-6150, Japan
e-mail: dtj@nttdocomo.com

Copyright

© 2019 NTT DOCOMO, INC.

Copies of articles may be reproduced only for personal, noncommercial use, provided that the name NTT DOCOMO Technical Journal, the name(s) of the author(s), the title and date of the article appear in the copies.