



## Preface

# Special Issue on Cutting-Edge R&D

A handwritten signature in black ink that reads "Tatsuo Tomita". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Tatsuo Tomita  
President  
Fujitsu Laboratories Ltd.

The environment around us is changing in diverse ways, giving rise to unprecedented new and challenging issues. They include issues that are close to us and which impact our daily lives, such as security and health, to larger issues that encompass and affect us on a wider global scale, inclusive of issues related to society, corporate management, transportation, pollution, natural disasters, the global environment, the world economy, energy and food supplies, and diplomatic relations between countries. These issues are becoming increasingly intertwined, giving rise to even greater and more complicated problems. The conventional approach of dealing with specific issues individually can no longer provide viable solutions—we are in an era in which closely inter-related problems must be treated as a system and dealt with promptly. To this end, information and communications technology (ICT) is taking on an increasingly prominent role.

Amazing advances in ICT are already enabling environments in which information can be conveniently obtained nearly anytime and anywhere via networks. At the same time, when we see pedestrians and even bicyclists using smartphones while in transit, it makes it hard to deny that many people have become overly dependent on ICT, and that some are preoccupied with the virtual world. There is also the growing problem of a digital divide in which many individuals are being left behind as ICT progresses. One cannot help but feel that ICT is not fulfilling its true obligations to all people in society. For example, although the Great East Japan Earthquake and the subsequent need for recovery support underscored the valuable role that ICT can play, there is still the feeling that ICT has yet to address problems on an individual level. Hereafter, ICT must go beyond merely making our lives more convenient—to enable all to feel they are leading fulfilling and joyful lives, it is essential that we bring about a world that leverages ICT in a *human-centric* manner.

In Fujitsu's vision of a Human-Centric Intelligent Society, innovation enabled by people maximizing their full potential, and information that creates new value, will drive the sustainable growth of a prosperous and personally enriching society in which people can lead safe and secure lives. We feel that the evolution of ICT will enable individuals to engage in activities that

lead to fulfillment for people, and we aim to achieve a Human-Centric Intelligent Society with our customers by targeting the happiness of each individual.

The mission of Fujitsu Laboratories is to support the growth of the Fujitsu Group by developing advanced technologies and driving innovation. Toward the realization of a Human-Centric Intelligent Society, with the aim of researching and developing technologies useful for people, and by contributing to business expansion, we will continue to undertake diverse and wide-ranging R&D, from solutions and services to system/network/ubiquitous products, devices, and materials. This special issue highlights some of the R&D we have undertaken, from a perspective of how such technologies can benefit and provide value to our customers.