Editor's Message to Special Issue on Computer Security Technology Enriching the Future

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Recently, many incidents on the APT (Advanced Persistent Threat) to the government and big companies are reported. According to the IPA report, "Attack to the vulnerability of client software" and "APT" are the top two of the top 10 threats in 2013. In addition, new threats such as abuse of social networks and conspicuous increased use of cloud computing are appearing. Moreover, along with the popularization of smart phones and tablet terminals, attacks aimed to these apparatus sprout like mushrooms and the number of attacks is considered to increase from now on. Everything from soup to nuts is connected to the Internet and conformation of "the Internet of things" where any objects connect to any objects can be seen. Information to flow into the networks is produced in significant amount and diversifies. It is desired to send such information safely and securely. Therefore, in the areas of core infrastructure, control systems, motor cars, information apparatus, medical equipments, mobile phones and etc. security is requested significantly. Moreover, since the election campaign using the Internet began this year, importance of secure and safe networks are reacknowledged.

In this special issue, security technologies to realize the prosperous future of safe, secure, comfortable and human-centered lives where advantages of continuously progressing ICT are utilized effectively are widely asked for submission. This special issue focused on papers that represent such computer security technologies in terms of basic theories and techniques, protocols, architectures, software systems, applications and implementations, operation and management, and social-scientific analyses.

48 manuscripts were contributed, and 18 manuscripts were finally selected excluding one withdrawal. I believe that high level papers are selected. Based on the JIP Special Paper Selection Process commencing from this year, we have chosen a specially selected paper which is contributed by Mitsuaki Akiyama et al, "Observation for Activity of Adversary by Active Credential-Information Leakage." This is an excellent paper with high originality and usefulness executing long term operation and evaluation of the developed observation system. The numbers of papers in the specific areas are as follows: security fundamental technology 4, security and society 4, network security 3, risk management 2, system security 2, and distributed system operation and management, wireless/mobile network and architecture 1, respectively. Taken overall, papers are selected from wide range of areas with good balance along with our basic policy. It is expected

that these papers will contribute to enrich the prosperous future. In this issue, approximately half of the total number of papers is written in English. I think it is desirable for globalization of the Information Processing Society of Japan.

Finally, I would like to express my gratitude to the great editorial team, the reviewers, the secretariat, and of course to the researchers sending in their great manuscripts. This special issue would not have been possible without their contributions. I also gratefully acknowledge the Editorial Board, and Katsunari Yoshioka (Yokohama National University) and Takeshi Okamoto (Tsukuba University of Technology), for arrangement and management with their strong contribution.

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