2017 C&C Prize Ceremony

On the late autumn afternoon of November 29, 2017, the 2017 C&C Prize Ceremony was held at the ANA InterContinental Hotel Tokyo with around 110 attendees (**Photo 1**).

The day's program began with a welcoming speech by President of The NEC C&C Foundation, Mr. Kaoru Yano. He announced that the C&C Prize for this year was the thirty-third one to be awarded and that 67 groups and 110 persons received the prize so far. The speech was followed by the recognition of the 2017 prizes to the Group A and Group B recipients by Dr. Tomonori Aoyama, Chairman of the Awards Committee. The Group A recipient was Dr. Mitsuo Kawato, Director and ATR Fellow of the ATR Brain Information Communication Research Laboratory Group, Advanced Telecommunications Research Institute International. This award acknowledged his "contributions to pioneering research and development based on the advanced integration of neuroscience, artificial intelligence, and information engineering, and its innovative application to psychiatry". The Group B recipients were Prof. Alfred V. Aho of Columbia University, Prof. John E. Hopcroft of Cornell University and Prof. Jeffrey D. Ullman of Stanford University, for "outstanding contributions to laying the foundation of theoretical computer science and to education in that field through numerous influential publications". Research details and citations were announced and certificates, plaques and "MOKUROKU" were then presented to the prize recipients by President Kaoru Yano (**Photo 2**).

Mr. Tatsuya Terazawa, Director-General, Commerce and Information Policy Bureau of the Ministry of Economy, Trade and Industry (METI) delivered a congratulatory speech to the recipients. Respect was expressed to Dr. Kawato for his leadership, endeavors and contributions in the fields of nursing and medical care by applying information communication technology using brain waves to solve current Japanese issues related to the super-aging society. He also expressed gratitude toward the significant roles in programming technology played by Profs. Aho, Hopcroft and Ullman, who have contributed to the remarkable progress of the current information communication society. He also praised the impressive social impact of their achievements. Subsequently, Dr. Makoto Ando, President-Elect of the Institute of Electronics, Information and Communication Engineers (IEICE), honored the status of Dr. Kawato who has explored uncharted territory in a discipline that demands long years of study. He also expressed gratitude and respect to three Group B professors for their research related to construction of information communication infrastructures, as well as for their contribution to cultivation of human resources essential for the development of relevant research while mentioning the collaborative work with SDGs of the United Nations. The awards presentation then ended.

Acceptance speeches followed and Dr. Mitsuo Kawato of Group A delivered a lecture on achievements in the leading R&D based on the advanced fusion of brain science, AI and information engineering and the innovative applications of results in psychiatry. He talked about the reality of the AI boom of
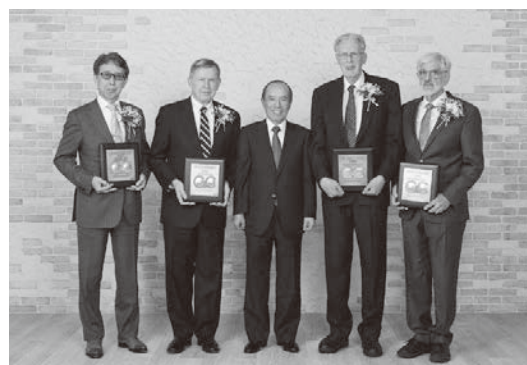

Photo 1 2017 C&C Prize Ceremony.

Photo 2 From the left: Dr. Mitsuo Kawato, Prof. Alfred V. Aho, President Kaoru Yano of The NEC C&C Foundation, Prof. John E. Hopcroft and Prof. Jeffrey D. Ullman.

today in which robots and computers are still far inferior to humans and how little is in fact known about the brain. He went further to explain the progress of research into computational neuroscience. This is a field of study focused on gaining a deep and fundamental understanding of brain function by using a computing system to emulate the brain's ability to process information. Dr. Kawato also explained the actual status of the diagnosis and treatment of mental and developmental disorders and the potential of brain science and AI technologies by referring to previous studies. The speeches of three professors of Group B started with one entitled "The Evolution of Algorithms" by Prof. Aho, who first talked about the recognition of the importance of software in today's society, while also introducing the role of algorithms in quantum computing as a recent topic. Next, Prof. Hopcroft spoke about "My Career", describing how he enjoys engagement in academic education in many countries, including China, based on his own experience that the career of a teacher is affected greatly by the quality of and relationship with the doctoral course students, quoting several examples. Finally, Prof. Ullman looked back on the history of database theory research under the title "Theory Meets the Database", introducing such topics as the relational model and lossless join property, as well as future perspectives of database theories. All of the speeches demonstrated that key technologies are essential and indispensable as the driving force behind the advancement of present-day society and to help solve its problems. Prize recipients thereby succeeded in renewing the listeners' perception of the relationship of the prized achievements and C&C. After the acceptance speeches a cocktail party was held that offered a social atmosphere in which attendees were able to express their congratulations to the award recipients. Here also, the attendees could enjoy meeting each other and participating in friendly conversation. The dinner party began with greetings and a toast by Dr. Shojiro Nishio, President of the Information Processing Society of Japan. As the dinner ended, congratulatory speeches were presented by representatives of the guests and the prize recipients expressed their thanks for this contribution. The ceremony was closed amidst enthusiastic applause.

The 2017 C&C Prizes were awarded for new applications of AI-based C&C technology to psychiatry and for the academic contribution to theoretical computer science as the basis of supporting information science. Both of these disciplines applaud the long years of research into C&C technologies that are expected to be an essential platform in contributing to the advancement of the IT society.

The details about this paper can be seen at the following.

Related URL:

For more information about the recipients of the C&C Prizes please visit The NEC C&C Foundation website.
http://www.candc.or.jp/en/2017/2017_prize_cc.html

About The NEC C&C Foundation

The Foundation is a non-profit organization established in March 1985 to foster further growth in the electronics industry by encouraging and supporting research and development activities and pioneering work related to the integration of computers and communications technologies, that is, C&C, and ultimately to contribute to the world economy and the enrichment of human life. The Foundation is funded by NEC Corporation.

The Foundation currently has two main activities. It presents the annual C&C Prizes to recognize outstanding contributions to R&D activities and pioneering work in the area of C&C. Candidates are recommended from all over the world. Each prize winner receives a certificate, a plaque, and a cash award (ten million yen per group). As of 2017, 110 prominent persons had received the prize. In addition, an Outstanding Paper Award for Young C&C Researchers is awarded annually to outstanding paper(s) presented at an international conference overseas with the support of a grant from the Foundation. Each recipient is given a cash award of 200,000 yen.

The Foundation also gives the following two grants: (1) grant to enable researchers in Japan to attend international conferences overseas to make presentations in the field of C&C and (2) grant to non-Japanese researchers in Japan.

In accordance with the recent implementation of the new act, being authorized by the Japanese Government, the Foundation changed its legal status into a public interest incorporated as of December 1, 2010.

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