Report on the computer software contest at the 43rd Congress of the Japan Society of Anesthesiology

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We held another computer software contest at the 43rd Congress of the Japan Society of Anesthesiology (JSA), which took place in Okayama in March 1996. This is a brief report on this contest from members of the Executive Committee. The aim and procedures have been explained in the previous five reports [1–5]. This report will be limited only to aspects that differed from the previous five events.

We recruited two more members (Y.O. and T.S.) to the Executive Committee, both of whom belong to the Department of Anesthesiology at Okayama University. They arranged most of the practical aspects of the contest.

We received 20 entries for the contest. For the first time in the history of the contest, we had two entries from abroad (Taiwan R.O.C.). The spectrum of computers and operating systems (OS) for which the software was intended showed a marked shift from NEC PC9801 and Macintosh to various other types of instruments/OS, including one intended for Internet access (HTML language) (Table 1). Only one software entry was designed solely for NEC PC9801, while five were entered solely for Macintosh. Two software entries were revised versions adapted to Windows from those originally developed for MS-DOS. One software entry (data) was written in the HTML language, and is intended for posting on the Internet. Windows has now become a central OS for which the software was developed. This trend was especially marked in the software

receiving prizes. Out of ten, seven were for MS-Windows while the remaining three were shared by Macintosh, Unix, and HTML. The total number of co-workers for all 20 software entries was 54.

We received donations from various sources in the form of goods or funding. Examples of coveted prizes were: a pulse oximeter, three HP200LX palm-top computers, and five digital cameras.

The grand prize was awarded to Dr. Tomohiko Saito after having been withheld for the last 3 years. The authors and titles that were awarded the top six prizes and the four extra prizes are listed in Table 2. All entries that received prizes were announced as free software.

The software by Dr. Saito deserves special mention. It is intended for analyzing the wave data using fast Fourier, inverse Fourier, and self-regression analyses. While its application to anesthesia may be limited to special groups of data, its high level of analytical power was considered to deserve the Grand Prize. With its high quality and its special applicability, it is an impressive achievement and a useful piece of software.

For some unknown reason, the size of software has shrunk markedly this year over previous years. We had virtually no software containing a large amount of visual and/or auditory data this year. We are curious as to what caused the trend observed this year.

It has already been arranged that both the 44th (1997) and the 45th (1998) Congresses of the JSA are to hold a software contest. As we accepted two software entries

Table 1. Spectrum of computers and OSs for which the software is intended

NEC PC9801	1
Macintosh	5
Windows	9
Unix	2
Data in HTML	1
Pure data	2

OS, operating system.

Table 2. Authors and titles that were awarded the top six prizes and four extra prizes. (The English titles, originally given by the individual software authors, have been slightly modified by the authors of this report so as to match the content. The names in parentheses after titles indicate the computer/OS.)

Grand Prize:
T. Saito et al.
Department of Anesthesia, Okayama University
Program for wave analysis by fast Fourier transform (FFT), inverse FFT (iFFT), and the autoregressive model (ARM). (Windows)

Prizes for Excellence (in alphabetical order of the first authors)
E. Echikawa et al.
Department of Anesthesia, Hamamatu Medical School
An Implementation of "Search for TACCHAN," the title index to Japanese anesthesiological journals in the World Wide Web. (HTML)

S. Hagihira et al.
Department of Anesthesia, Osaka University
Software for capturing and creating files of printer outputs. (e.g., Unix)

T. Katoh et al.
Department of Anesthesia, Hamamatu Medical School
Software for producing CD-ROMs for the 42nd Annual Meeting of the Japan Society of Anesthesiology. (Windows)

M. Nakao.
Department of Anesthesia, Chugoku Electric Power Hospital
Integrated alarm system. (Macintosh)

M. Satoh et al.
Department of Anesthesia, Ohtsuka branch of Tokyo Municipal Hospitals A medical statistics program for MS-Windows. (Windows)

Extra Prizes:
Prize for Special Technique
Tien-Hsing Ku
Department of Anesthesia, Changhua Christian Hospital (Taiwan)
Software for collecting analog and digital data from anesthetic machines. (Windows)

Prizes for Humor
Tien-Hsing Ku
Department of Anesthesia, Changhua Christian Hospital (Taiwan)
Teaching program for anesthesia practice. (Windows)

O. Uchida
Department of Anesthesiology, National Cardiovascular Center
Anesthesiology on a screen saver. (Windows)

Prize for Newcomers
Y. Fujimoto
"Appendicitis": Windows version. (Windows)

Prize for Good Effort
M. Tsukada
Department of Anesthesia, Kiso branch of Nagano Prefectural Hospitals
Program chart for anesthetists made using Tcl/Tk and LaTeX. (Unix)

from Taiwan this year, we will maintain our policy of keeping this contest open to foreign applicants. The English version of the OS for both Macintosh and MS-Windows will be available if we receive entries requiring them. We welcome entries from abroad, as long as the entrants agree to our policy that the software entered will be distributed free, making all information available to the users. The authors of the software are free to revise and distribute it independently even via commercial routes.

References

1. Suwa K, Miyasaka K, Tanaka Y, Ozaki M, Mori T, Iwase Y, Nishi S (1991) Report on the computer software contest at 38th Congress of the Japan Society of Anesthesiology. J Anesth 5:441–444
2. Suwa K, Watanabe R, Iwase Y, Mori T, Ozaki M, Tanaka Y, Miyasaka K (1993) Report on the computer software contest at the 39th Congress of the Japan Society of Anesthesiology. J Anesth 7:124–126
3. Suwa K, Harada K, Watanabe R, Iwase Y, Mori T, Ozaki M, Tanaka Y, Miyasaka K (1994) Report on the computer software contest at the 40th Congress of the Japan Society of Anesthesiology. J Anesth 8:250–251
4. Suwa K, Uchida T, Nakayama Y, Watanabe R, Iwase Y, Mori T, Ozaki M, Kondo Y, Tanaka Y (1994) Report on the computer software contest at the Forty-First Congress of the Japan Society of Anesthesiology. J Anesth 8:508–509
5. Suwa K, Echikawa E, Nakayama Y, Iwase Y, Mori T, Ozaki M, Kondo Y, Tanaka Y (1995) Report on the computer software contest at the 42nd Congress of the Japan Society of Anesthesiology. J Anesth 9:390–391