IAMAS サウンドスタジオレポート

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この発表では岐阜県立国際情報科学芸術アカデミー（IAMAS）における音楽、音響作品制作の
コンセプトと学内の音響設備、ならびに IAMAS で実現した最近のプロジェクトについて簡単に
紹介する。IAMAS では学生が実際の体験を通して学べるよう、音楽の授業でも非常に高いレベ
ルが要求される様々な音楽及びマルチメディアのプロジェクトに学生が参加している一方、これ
らと並んでより学術的かつ実験的な研究プロジェクトも同時に行われている。

IAMAS Sound Studio Report

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This paper presents an overview of the philosophy and facilities for work with digital sound
at IAMAS as well as a brief look at recent projects realized at IAMAS. It should be borne in
mind that IAMAS is dedicated to student learning through practical projects and thus the
computer music program is being developed to facilitate the realization of musical and
multimedia projects with the highest technical quality, while simultaneously supporting and
encouraging experimental research projects of a more abstract nature.

OVERVIEW

The pursuit of computer music pedagogy and research at IAMAS is taken in the context of a multimedia academy dedicated to the education of multimedia artists and technicians. Therefore we have the dual responsibility of providing facilities and guidance to students who wish to seriously pursue computer music research in the course of their studies, and to rapidly train students desiring a more general multimedia focus with both necessary professional skills in studio work, sound recording and MIDI, as well as the study of selected artworks to put these skills in an aesthetic context.

SOUND FACILITIES

The sound resources at IAMAS are presently undergoing rapid expansion. The following description is a snapshot of our current configuration, however it should be noted that flexibility of reconfiguration is one of the major virtues of the IAMAS facilities.

Audio facilities comprise a professional digital multitrack recording and production studio for integrating audio and video, and for mastering to DAT, Video, or CD-R, a set of three fully equipped MIDI/Digital audio workstations, and an experimental sound studio for exploring unusual sound production configurations and for testing recently acquired equipment. A dedicated computer music studio is planned for the near future, based on a Sparc 5 Workstation running NeXTSTEP operating system for the purpose of supporting research and intensive study of DSP techniques on a general purpose computer with an environment suitable for precise listening and experimentation.

In addition to our dedicated sound environments, most of the work spaces at IAMAS contain powerful multimedia computers with capabilities for computer music experimentation including PCs, Macintosh and SGI computers. All of these computers are networked on a fast LAN and it has proved relatively painless to transfer large amounts of audio data across the network to the precise facility needed for a particular treatment.

PROJECTS

Although the academy has only been open since April 1996, IAMAS has already hosted several successful technology-intensive musical performances. Perhaps most ambitious was a simultaneous audio/video performance in Japan, France and Australia over ISDN lines in collaboration with Zbigniew Karkowski in Japan, Atau Tanaka in France and Digital Primate in Australia and simultaneously broadcast to the internet by StreamWorks server. The technical aspects of this project were coordinated and realized primarily by students and selected faculty at IAMAS. The performance is documented at URL http://www.iamas.ac.jp/~eric/ISDN/isdn.html.

Another performance project was presented by Masahiro Miwa in Berlin and Cologne under the auspices of the Sonambiente Festival. This project had four performers, Satoru Wono, Yoshihiro Kawasaki, Eric Lyon and Masahiro Miwa. This project integrated the varied skills of the performers including contemporary DJ techniques (Wono), environmental sounds and processing (Kawasaki), DSP programming on Kyma system (Lyon) and MIDI and MAX programming and integration (Miwa). The performance concept and configuration were prototyped and rehearsed at IAMAS.

IAMAS student Kyo Akabane presented a sound installation at Digitale'96 in Cologne based on sound data generated by manipulating specially built wooden blocks with sensors.

Two CD Projects were realized at IAMAS studios. The first is the composition "Clear Stream Temple", composed by Zbigniew Karkowski, commissioned for the SONDERANGEBOT Staalplaat Recordings anniversary CD. The track is a recording of IAMAS student Ogura Ippei improvising Buddhist chant with multitracked DSP processing on the Kyma system. The track was produced and mastered by Eric Lyon on the Pro Tools digital audio system. The second project is a CD of music by Eric Lyon, in which CD mastering and artwork were produced entirely at the IAMAS facilities with the assistance of graphic artist and IAMAS faculty member Hideyuki Oda.

Software development is another ongoing concern. Popular Unix DSP tools are being ported to the SGI environment to facilitate teaching computer music on this platform. The spectral processing toolkit POWERpv (presented at the 1996 ICMC by Eric Lyon) is undergoing further refinement and testing on the SGI platform. The program BashFest, a virtual drum machine by Lyon is undergoing expansion to integrate various sound processing and routing schemes.

As a community service, Masahiro Miwa has developed the Firstclass Server Art and Media Link as an important source of information about computer music. This serves both to coordinate internal IAMAS projects and to foster communication and collaboration among practitioners of computer music in Japan. The BBS address of Art and Media Link is iamas_fc.iamas.ac.jp, port number 3004 through Internet, or modem number 0584-77-1528. Please feel free to join in.

As another community service, IAMAS collaborates with XEBEC hall in Kobe to present a series of workshops on the MIDI programming language MAX, with organizational assistance from Masahiro Miwa.

CONCLUSION

IAMAS is an excellent place to practice computer music. It is already one of the best equipped studios in the world in terms of computers and sound technology. It is a multidisciplinary academy where students benefit from the interaction of many experts in the diverse fields of multimedia arts. Given the practical focus, it is likely to enhance the art world with both works developed onsite and by the future activities of students educated in an extremely stimulating and artistically engaged environment.