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Overview of the CCRMA Digital-Audio Facility

Since 1966, members of the CCRMA community have been dedicated to the development of the computer as a new musical and artistic medium. In June of 1975, the Center for Computer Research in Music and Acoustics was formed with funding provided jointly by the National Science Foundation for research and teaching in computer techniques of interactive sound production and the perception of timbre, and by a one-time grant from the National Endowment for the Arts for computing equipment for musical purposes. The Center also receives support from private gifts, corporations, the National Endowment for the Arts, the National Science Foundation, the California Arts Council, the Rockefeller Foundation (for visiting US composers), and the System Development Foundation (for research).

In addition to initial equipment grants to establish the center, recent steps taken at CCRMA to advance the effectiveness of the center as a resource have included fund raising for:

> the completion of a newly refurbished facility on the Stanford campus which includes special studios for digital synthesis and composition. These include a large experimental performance space with adjoining control room/studio, an all-digital recording studio with adjoining control room, a midi-based small systems studio, several work areas with personal computers and synthesizers and a classroom.

> the acquisition of state-of-the-art audio and computing equipment through grants, donations, and gifts-in-kind. This includes the acquisition of personal computers, Yamaha X-series digital synthesizers, a MIDI based studio, an array processor, and specialized computer and signal processing hardware in addition to the mainframe computer and special purpose custom built synthesizer in general use at the Center.

CCRMA's main goal is to maintain an interdisciplinary, technologically advanced facility where composers, musicians, researchers and students can work together using the computer as a musical and artistic medium, and as a research tool to create new works of art. The facility is capable of serving a number of composers and researchers simultaneously in a rich interactive environment. As technology moves forward in new directions, and as the medium becomes more and more accessible to the artistic community, CCRMA will strive to integrate these new technologies to provide an environment where artistic experimentation and ideas can be realized and where resident and visiting scholars, teachers, composers and musicians can learn about and use new technologies.

Activities at CCRMA include teaching, research, composition, interactive performance, digital recording, music transcription, concerts, presentations, workshops, and a program to provide access to the facility to visiting scholars and composers.

Currently there are 56 active "users" at CCRMA including: 15 faculty, staff, and research associate/composers, 21 graduate students, and 20 foreign and domestic guest composers/researchers.

Composers working at the center have received fellowships from the National Endowment for the Arts, the Fulbright Foundation, the Guggenheim Foundation, the Harkness Foundation, and various foreign government agencies. CCRMA has also received a grant from the Rockefeller Foundation to support visiting American composers.

Works produced at the Center have been presented in concert and broadcast on radio throughout the U.S. and in Europe, Japan, Australia, and South America and have won numerous awards. They have been represented at major new music festivals including the International Electroacoustic Music Competition of Bourges, the Venice Biennale, the Warsaw Autumn Festival, the New Horizons Festival in New York, the Cologne Festival, the International Computer Music Conference in Paris, and the Aspen Festival. Works were presented this year at the Cabrillo Music Festival, Triplex in New York City, the International Computer Music Conference in Holland, the Darmstadt Festival in Germany, the Roro Festival in Sweden, and at Tanglewood.

Current works at the center include a collaboration with composer Dexter Morrill and jazz musician Wynton Marsalis for a piece for saxophone and computer generated tape; a collaboration with composer Michael McNabb and choreographyer Brenda Way for a five movement dance piece for live and taped computer synthesis, piano, saxophone, dancers and robot; a musical theater by composer Janis Mattox; a work for computer and digital keyboards by composer John Chowning; a work commissioned by the Kronos String Quartet for string quartet and computer tape by composer David Jaffe; a commission for a choral work with tape by composer David Jaffe; a commission by the Kronos String Quartet for a work for string quartet and computer tape by composer Ira Mowitz; a work for bass clarinet and tape by composer Amnon Wolman commissioned by Harry Spaarnay; a work commissioned by musician Stan Getz for saxophone, orchestra and computer tape by composer Amnon Wolman; a work for string quartet and tape by composer Stanislaw Krupowicz, a work for piano trio and tape by composer Chris Chafe, and an opera theater piece by composer Amnon Wolman.

CCRMA also holds annual workshops in computer music open to the public and presents demonstrations of ongoing work and concerts in the SF Bay Area.

Interviews and presentations of the work at CCRMA have been presented on Public Television, National Public Radio, in National Geographic Films, on NBC, in documentary films in Switzerland, Germany, Austria and the U.S. and on recordings.

CCRMA Staff
    John Chowning, Director, Professor of Music
    Patte Wood, Administrative Director
    Chris Chafe, Technical Coordinator, Composer/Research Associate
    Mark Dalrymple, Audio Engineer
    David Jaffe, Composer/Research Associate
    Heidi Kugler, Secretary
    Max Mathews, Research Professor
    John R. Pierce, Visiting Professor Emeritus
    Bernard Mont-Reynaud, Sr. Research Associate
    William Schottstaedt, Composer/Research Associate
    Julius Smith, Research Associate
    Leland Smith, Professor of Music
    Tovar, Systems Programmer