The Digital Art: "The computer musician"
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The lecture will provide an introduction to systems and methods for making computer music the future and possibilities of personal computers, questions of software development, and above all, MIDI in connection with personal computers.

The introduction discusses why musicians should be using a personal computer or dedicated micro instruments and peripherals to make music–the control possibilities, the visual enhancements, the improved compatibility of instruments of different makes and the means of playing drums, guitar, keyboards, and distinguishing each from the other, add-on music printing, increased memory storage, and educational interactive programs.

This is followed by an examination of some sample programs utilizing the musical attributes of popular microcomputers and further practical examples covering the following areas of computer music for live performance, studio composition and recording.

Computer-linked music systems have been a means of entering the world of digitally-sythesised and controlled music in the last few years. In particular, the Apple II has been the base for Alpha-Syntauri, Soundchaser, Roland Amdek Compumusic, the Jen Musipack 1.0 systems, and CBS Rhodes Chroma/Polaris synthesizers.

Roland's Micro-Composers have provided another self-contained line of unique compositional tools for DCB and voltage controlled instruments, and the drum computer is much more readily accepted as a viable addition or alternative to acoustic percussion.

The Musical Instrument Digital Interface (MIDI) is a landmark in technological development for the musician and opens up new dimensions in the playing and control of electronic instruments such as keyboards, guitars and drums. The lecture offers valuable information on the new MIDI-equipped instruments, including MIDI concepts and usage for recording, programming, processing, synthesis and music printout via a personal computer.

The Computer Musician's studio will undoubtedly take on a new look as the computer technology is increasingly implemented, and alongside the video and electronic hardware already available will present new challenges (and problems) in layout and operation. A major part of interfacing is in achieving correct synchronization between equipment and peripherals. The Roland syns code has been widely accepted for use with small scale projects needing the sophistication of SMPTE time code and can be linked with the MIDI system easily.

Programming methods for music recording and playback opens up important concepts of software programming for the future. A variety of approaches are discussed, including real-time programming, manual input techniques, sound sampling and program storage.

Already, educationalists and composers alike see the micro-music system encouraging the use of traditional notation, as well as enhanced scoring methods…