Letters

Reviving Music V

As incredible as it sounds, Music V (Mathews 1969), the glorious software created by Max Mathews 53 years ago, runs again on modern laptops and single-board computers.

Thanks to the GFortran software, Massimo Marchi and I (who are members of the music center AGON in Milan) have managed to run a number of FM and AM synthesis jobs with a copy written in Fortran, both in Mac OS on an Apple Macintosh and in Linux on a single-board computer, the UDOO X86.

The Music V files were obtained from a site (ftp://ccrma-ftp.stanford.edu/pub/Lisp/music-v.tar.gz) at Stanford University's Center for Computer Research in Music and Acoustics (CCRMA), as kindly suggested to us by Steven Yi, the author of Blue, a music composition environment for Csound. The software from Stanford includes some indications of provenance and usage instructions. It came from an old XPG output file that was written, probably by George McKee, on 19 June 1975 at the Stanford Artificial Intelligence Laboratory. That document was in the form of a printout that Bill Schottstaedt of CCRMA manually transcribed, after which he made updates and added comments, completing the project on 26 April 2008.

The program has the default GEN 1, GEN 2, and GEN3, but none of the GENs listed in Jean-Claude Risset's *Introductory Catalogue* (Risset 1969).

To run the software, it is sufficient to divide the original .f file with a text editor into three sections as indicated in Schottstaedt's instructions, compile them with GFortran, and finally run the executable files in a terminal. The output is a 32-bit floating-point sound file with a sample rate of 20 kHz. The raw sound file that is produced can be later opened with Audacity and exported into any popular audio format.

Our group also hopes to explore the DOS version of Music V at Padua's Centro di Sonologia Computazionale (CSC), apparently an internal update from a file received from Max Mathews himself.

These historical pieces of software can be an important aid in computer music history and technology education.

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References

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doi:10.1162/COMJ_c_00483