J ENGELHARDT

Building 28A

October 1980 (last issue 7/80)

FUTURE MEETINGS

Speech Recognition

NEWSLETTER OF THE HEWLETT-PACKARD MICRO-COMPUTER INTEREST GROUP

by Tom Larson, Heuristics

October 28, 12 noon, in the 5M Conference Room

In recent years, <u>computer technology and linguistic analysis have been wed</u> to form the field of speech recognition. Accurately identifying spoken words requires compiling a list of cues embedded in every utterance that separates the specific words from all others in a vocabulary. This process is learned by an early age in humans and is now becoming solvable by machine because of the availability of inexpensive computing power. <u>Current trends in</u> speech recognition will be discussed and a hardware system demonstrated.

Speech Analysis

by Tony Chan, Applications Engineer with Texas Instruments

November 4, 12 noon, in the 5M Conference Room

A digital model of the human vocal tract is used by TI to realize speech production in solid state circuitry. As complex as speech may sound much of the information is redundant. TI has succeeded in distilling the essence of speech so that the memory required to store this information can be reduced by a factor of 80 from traditional techniques. <u>Included in this presentation will</u> be a demo of TI's new Solid State Speech Module.

PAST MEETINGS

Design Considerations for a Commericial Digital Sound Synthesizer

by Jerrold Kaplan, Stanford Research Associate

On July 23 Jerry Kaplan of Stanford demonstrated a versatile digital sound synthesizer he co-designed with Harold Alles. The instrument was capable of producing a wide range of traditional timbres in addition to some 'wayout' sounds. One of the many interesting results of the digital nature of the invention allowed all musical events to be precisely recorded (stored in memory) at the time they are played and recalled at any later time. This allowed Jerry to play some amazing duets with himself at the touch of a button. Transposing keys, a polyphonic keyboard, multiple voicings, separate rhythm and pitch control were dramatically demonstrated in the meeting that lasted more than one and a half hours.

Volume Floppy Disk Drive Purchase

Mike Beaver intends on making a volume buy on new Shugart floppy disk drives in early November. An 8 inch drive, the SA-801R, is available for approximately \$490, tax included. It will also be possible to purchase a five inch drive, but the model number and price were unavailable at press time. This is an excellant price for a new drive which will be purchased locally, so there are no freight charges. Contact Mike in writing by the end of October if you are interested. Mike is also looking for a good S-100 disk controller card for possible group purchase. Any suggestions are welcome.

Hardware Update

The CPU and Front Panel boards are moving fast and furiously through the final stages of production! The CPU trial production boards (final artwork) are being exhaustively tested and delivery is anticipated in one month. One great bit of news is that the processor chips that are ordered for the board are the new 6 MHz Z-80, rather than the slower 4 MHz parts. Systems are now running with these fast parts in our prototype boards.

Vaughn Marian and Barry Lewis will be handling the production of the Front Panel board. The final version of the artwork for the FP board is now being generated and requires testing before production can begin.

Request for Hardware Survey Forms

Steve Hessel asks that any builders who haven't returned their hardware survey forms, please do so immediately. Without your input you loose the valuable opportunity to direct the course of the club's design efforts. Steve intends on compiling the survey results soon, so please reply ASAP to <u>Steve Hessel</u>, <u>build-</u> ing 29A (please note that the return address on the survey was incorrect).

WANT ADS

Debugging the address anticipation PROM board circuit - please call Steve Hessel, building 29A, x 5514.

S-100 boards - Steve Hessel would like a short term loan of any of the following standard boards: CPU, ROM, RAM I/O or Video.

For the following jobs please contact Mike Beaver in building 25 in writing:

PC Layout - for I/O and memory boards, must be experienced. Programmer - to write CPM driver to checkout hardware on our HPIB prototype board. Talk to Paul Zander, x 3776, or Mike. Debugging - access to an S-100 system necessary in some cases.

HP Microcomputer Interest Group

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