

C617993

COMPUTER SCIENCE

# #

KEY WORD:

MAJOR  
CONFERENCE / VOICE / LOCAL AREA NETWORK

KITTIWUT CHOOCHOTE : DEVELOPMENT OF VOICE CONFERENCE NETWORK FOR LOCAL  
AREA NETWORK. THESIS ADVISOR : ASST. PROF. WICHARN LERTWIPATRAKUL. THESIS  
COADVISOR : Cdr. ARAN NAMPHOL, Ph.D. 58 PP. ISBN 974-636-287-9

The research attempts to develop a conferenced software. This is done by broadcasting of voice data from the sender's machine to the receiver's machine via ethernet LAN.

In this sence of conference, there is only one sender at a time. There must be a moderator who is going to select the sender. It's also possible that many members may request to speak at the same time. In this case the moderator will make decision about who has the right to speak.

The development process is divided into 4 steps.

1. Try to record voice into computer and playback using one computer.
2. Try to broadcast some character data from sender to receiver.
3. Try to record voice into the sender's computer and broadcast to receiver's compter.
4. Integrate sender's and receiver's function into one program and add some additional necessary function eg. Each member can request to speak, the moderator can know who wants to speak and also can make selection.

In order to obtain the best voice quality, many test has been applied to the program to determine about voice clearance, voice continuity and the effective factors. The appropriate value of parameters for the program are: sampling rate = 4000 Hz, buffer size = 14 Kbyte and delay time between each packet = 1 millisecond.

ภาควิชา.....วิศวกรรมคอมพิวเตอร์.....

สาขาวิชา.....วิทยาศาสตร์คอมพิวเตอร์.....

ปีการศึกษา.....2539.....

ลายมือชื่อนิสิต.....กิตติวุฒ ชูโชค.....

ลายมือชื่ออาจารย์ที่ปรึกษา.....[Signature].....

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