

UNIVERSITY OF CALIFORNIA - MAJOR CAPITAL IMPROVEMENT PROGRAM
MOVABLE EQUIPMENT (GROUPS 2 AND 3)
BUDGET YEAR 2004 - 2005

Campus and Project Title: Santa Cruz, Engineering Building

Account No. 971020 Date of Submittal June, 2002 EPI 2627

High Value Equipment Justification

Room No.(s) 3313 Room Type: 210 – Research Laboratory
(Code No.) (Name)

Department/Activity Computer Engineering Program Code: 111409 – Computer Eng.
(Code No.) (Name)

Item Description: **Wall Display VizTek Xp1** Unit Cost \$ 70,000

Describe item briefly, what it does, and what it is used for:

Displays images and videos. Used for multimedia presentations.

Justification:

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The Viz-Tek Xp1 is a low-cost portable virtual wall. The display is 10' wide by 7.5' high. It is mobile, and this will enable experimentation with different room configurations. It is also less expensive than immobile virtual walls. The systems includes polarizers and 3-D glasses for with the 3-D immersive visualization and presentation. The system will enable advanced scientific visualization, remote collaboration, and presentation.

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Item Description: **Plasma Screens, Fujitsu Plasmavision**

Unit Cost \$ 5,000

Describe item briefly, what it does, and what it is used for:

Displays Images and videos. Used to display “virtual presence” of distant locations

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Several needed to merge multiple sites and provide full surround video. The 42” displays are for mounting on the side walls of the room. To experiment with different configurations and different uses of the room, the displays need to be able to pivot on the wall, angling more or less toward the front of the room, depending on experimental use.

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Item Description: **Smart Board 580 Epson EMP703**

Unit Cost \$ 5,000

Describe item briefly, what it does, and what it is used for:

Records Handwritten notes and figures. Used to visualise such notes and figures.

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Needed for experiments on new paradigms in personal and class notes editing.

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Item Description: **Shure P4800 Audio Mixer**

Unit Cost \$ 2,600

Describe item briefly, what it does, and what it is used for:

Mixes audio signals. Used for merging audio streams from microphones.

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Needed in order to use information from microphones. Controls the audio system through a one touch screen. Necessary for integrated system.

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Item Description: **Creston Control System** Unit Cost \$ 12,000

Describe item briefly, what it does, and what it is used for:

Controls all A/V through one touch screen rather than numerous remote controls

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Necessary for an integrated system. It is not feasible for the A/V specialist (generally, a student) to shuffle a dozen remote controls for the various A/V equipment.

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Item Description: **Cannon DZ-03600U**

Unit Cost \$ 3,500

Describe item briefly, what it does, and what it is used for:

A document camera that records hand-written notes and figures. Used to visualize such notes and figures.

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Needed for presenting and recording hand written notes in interactive course, research seminars, and working groups. One possible input for students in the experimental teaching laboratory.

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Item Description: **Cisco IPTV** Unit Cost \$ 28,000

Describe item briefly, what it does, and what it is used for:

Converts video and audio to web-streaming format.

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Allows videoconferencing to be streamed to the internet. The Cisco unit support -supports archiving and video on demand, low and high bandwidth, scheduling, dual video, tracking capabilities, and -built in IPTV and Windows Media support. A lower-performance model would require additional equipment to process multiple formats and to archive material.

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Item Description: **Radvision MCU-323**

Unit Cost \$ 15,000

Describe item briefly, what it does, and what it is used for:

A multipoint control unit allows more than one site to participate in a videoconference.

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Since the room is being designed so that 30 students or researchers can participate individually, 2 MCUs are necessary. Each MCU accommodates 15 simultaneous A/V connections, as well as additional phone connections, and are capable of IP video conferencing. Higher-end models (costing \$250,000) would additionally include voice-activated switching, video control by the chair/speaker, more channels, and both ISDN and IP support. These feature are not worth the extra cost.

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Item Description: **Tandberg 6000**

Unit Cost \$ 21,000

Describe item briefly, what it does, and what it is used for:

Unit establishes the connection for video conferencing, as well as controlling the audio and video.

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Essential component of the video conferencing, the codec is the interface between local and remote sites. The Tanberg model features dual video (the ability to send 2 video streams at a time), can handle 4 or more sites at the same time, has VGA input for transmission of computer data, and IP and streaming (for webcasting) capabilities.

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Item Description: **Dell Latitude C610**

Unit Cost \$ 2,500

Describe item briefly, what it does, and what it is used for:

Wireless laptop computer. Used by the students to collect data from the teacher and send data to the teacher and between each other.

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Needed for experiments on increased interaction and personalized class notes editing.

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Item Description: **KSI Professional Podium** Unit Cost \$ 5,000

Describe item briefly, what it does, and what it is used for:

Holds computers and notes. Used to run classes, visualizations, and seminars.

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Needed to hold computer and notes, and provide a location for the presenter or teacher.