PROGRAM

Data Compression Conference (DCC 2004)

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Snowbird, Utah
March 23-25, 2004

COMMITTEE:

SCHEDULE OVERVIEW:

Monday Evening, March 22:
Registration and Reception

Tuesday, March 23:
Morning: Technical Sessions
Mid-Day: Invited Presentation
Afternoon: Technical Sessions

Wednesday, March 24:
Morning: Technical Sessions
Mid-Day: Technical Sessions
Afternoon: Poster Session and Reception

Thursday, March 25:
Morning: Technical Sessions

MONDAY EVENING
Registration / Reception, 7:00-10:00pm (Golden Cliff Room)

TUESDAY MORNING

SESSION 1

Break: 10:00am - 10:20am

SESSION 2

Lunch Break: 12:20pm - 2:30pm

TUESDAY MID-DAY
INVITED PRESENTATION

2:30pm - 3:30pm

California Coding: Early LPC Speech in Santa Barbara, Marina del Rey, and Silicon Valley, 1967–1982

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This talk aims to sketch the historical and technical threads of the California portion of the story of the development of linear predictive methods for speech coding along with joint and parallel work in Japan, New Jersey, Massachusetts and Texas. The focus is on the 1970s, but the story begins earlier and the narrative covers through the early 1980s. Personalities, institutions, and milestones are considered along with technical developments and interpretations. With the benefit of hindsight, a brief technical tour of the basics of linear predictive coding is provided to provide context for the history. The primary personalities considered are Glen J. Culler, John Parker Burg, John D. Markel, A.H. (Steen) Gray, Jr., and Danny Cohen. The institutions emphasized include UCSB, SCRL, ISI, Culler Harrison Inc., and Time and Space Processing. The focal events are the first real time LPC speech communication on the ARPArnet, the first hardware LPC speech boxes, the book "Linear Prediction of Speech" by Markel and Gray, and the appearance of TI's Speak & Spell toy. The technical threads involve several variations and interpretations of LPC and the encounters of early LPC research with the origins of the Internet and the precursors of wavelet analysis. Anecdotal stories of interractions among researchers in California and foreign (nonCalifornia) institutions such as NTT, Lincoln Lab, and TI are recounted. The talk is based on oral histories, the literature, email and conversations, and the author's memories as a peripheral participant.

Break: 3:30 - 4:00pm

TUESDAY AFTERNOON

SESSION 3

Break: 5:40pm - 6:00pm

SESSION 4

WEDNESDAY MORNING

SESSION 5

Break: 10:00am - 10:20am

SESSION 6

Lunch Break: 12:20pm - 2:00pm

WEDNESDAY MID-DAY

SESSION 7

Break: 4:00pm - 4:30pm

WEDNESDAY AFTERNOON
POSTER SESSION AND RECEPTION

4:30-7:00pm

In the Golden Cliff Room

(Titles are listed later in this program;
abstracts of each presentation appear in the proceedings.)

THURSDAY MORNING

SESSION 8

Break: 10:00am - 10:20am

SESSION 9

Poster Session

(listed alphabetically by first author)