

NOV 28 :  
TUTORIALS  
DENVER CO  
NOV 29 - DEC 1:  
REGULAR SESSIONS  
DENVER CO  
DEC 2-3:  
WORKSHOPS  
VAIL CO

# NIPS'94

## NEURAL INFORMATION PROCESSING SYSTEMS: NATURAL & SYNTHETIC

MAJOR TOPICS  
ALGORITHMS AND ARCHITECTURES  
VISUAL AND IMAGE PROCESSING  
COGNITIVE SCIENCE & AI  
APPLICATIONS  
THEORY  
NEUROSCIENCE  
HARDWARE IMPLEMENTATION  
SPEECH AND SIGNAL PROCESSING  
CONTROL, NAVIGATION, & PLANNING

### TUTORIALS

- Andrew Barto, *Univ. of Mass., Amherst*  
"Reinforcement Learning"
- Leo Breiman, *UC Berkeley*  
"Statistics and Nets: Understanding Nonlinear Models from Their Linear Relatives"
- Dan Hammerstrom, *OGI & Adaptive Solutions*  
"A Survey of Pattern Recognition Hardware"
- Michael Kearns, *AT&T Bell Laboratories*  
"Recent Advances in Learning Theory"
- Teuvo Kohonen, *Helsinki Univ. of Technology*  
"Advances in the Theory and Applications of the Self-Organizing Map"
- Marc Raichle, *Washington Univ. Med. School*  
"Images of the Mind: A Tutorial"

### INVITED PRESENTATIONS

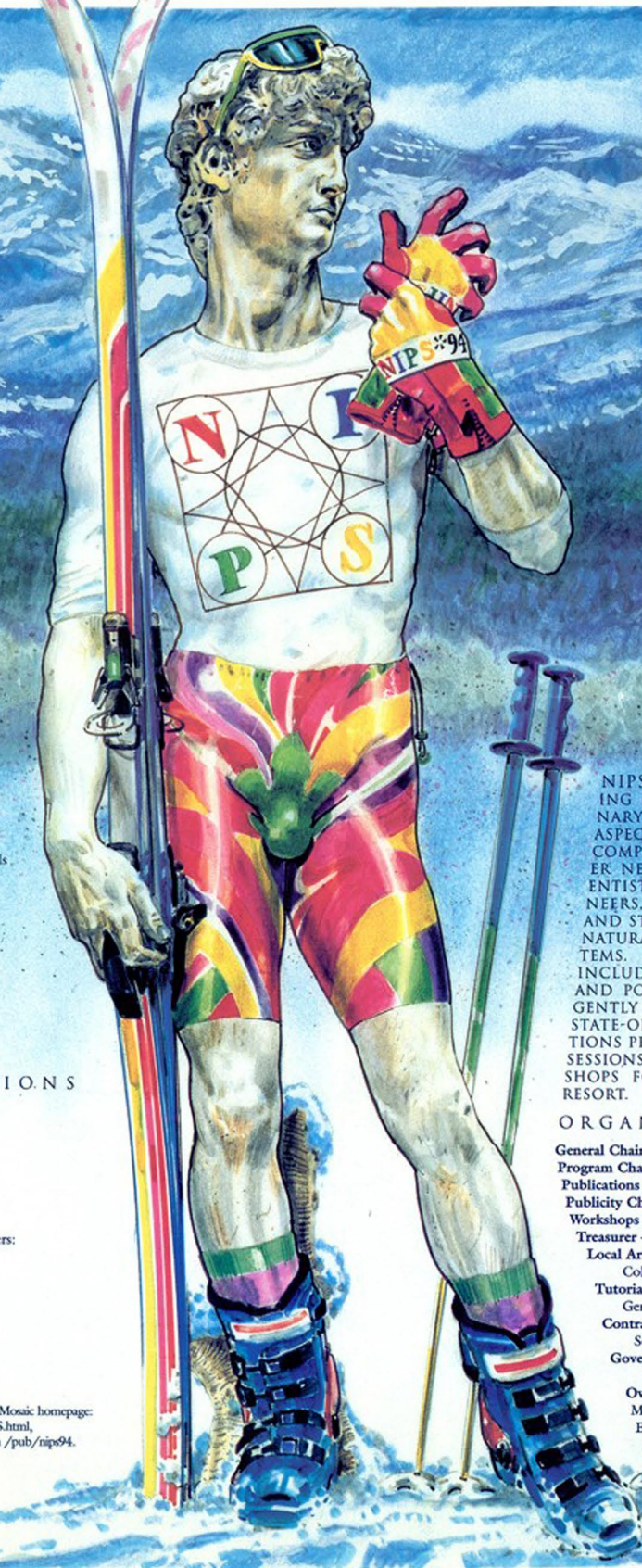
- Francis Crick, *Salk Institute*  
"The Problem of Visual Awareness"
- Yasser Abu-Mostafa, *Caltech & Neurodollar*  
"Financial Applications of Learning from Hints"
- Leonid Kitainik, *ParaGraph International*  
"Handwriting Recognition for the Newton"
- Michael Mozer, *Univ. of Colorado*  
"Three Bedrooms, Two Baths, and Four Hidden Layers: The Neural Net Adaptive House"
- William T. Newsome, *Stanford University*  
"Seeing and Deciding: A Winner-Take-All Decision Process in Cerebral Cortex"
- Malcolm Slaney, *Apple Computer*  
"Correlograms: A Tool for Sound Separation"

### Information Resources

A variety of conference information is available via the NIPS'94 Mosaic homepage:  
<http://www.cs.cmu.edu:8001/afs/cs/project/cnbc/nips/NIPS.html>,  
or via anonymous FTP from [mines.colorado.edu](ftp://mines.colorado.edu) (138.67.1.3) in `/pub/nips94`.

For other information, contact:

NIPS'94  
Dept. of Mathematical & Computer Sciences  
Colorado School of Mines  
Golden, CO 80401 USA  
(303)273-3880, [nips94@mines.colorado.edu](mailto:nips94@mines.colorado.edu)



NIPS'94 IS THE 8TH ANNUAL MEETING OF THE PREMIER INTERDISCIPLINARY CONFERENCE COVERING ALL ASPECTS OF NEURAL PROCESSING AND COMPUTATION. NIPS BRINGS TOGETHER NEUROSCIENTISTS, COMPUTER SCIENTISTS, COGNITIVE SCIENTISTS, ENGINEERS, PHYSICISTS, MATHEMATICIANS, AND STATISTICIANS WITH INTERESTS IN NATURAL AND ARTIFICIAL NEURAL SYSTEMS. THE SINGLE-TRACK CONFERENCE INCLUDES INVITED TALKS, AND ORAL AND POSTER PRESENTATIONS OF STRINGENTLY REFEREED PAPERS. A FULL DAY OF STATE-OF-THE-ART TUTORIAL PRESENTATIONS PRECEDES THREE DAYS OF REGULAR SESSIONS. TWO DAYS OF FOCUSED WORKSHOPS FOLLOW AT A WORLD-CLASS SKI RESORT.

### ORGANIZING COMMITTEE

- General Chair - Gerald Tesauro, IBM  
Program Chair - David Touretzky, CMU  
Publications Chair - Joshua Alpector, Bellcore  
Publicity Chair - Bartlett Mel, Caltech  
Workshops Chair - Todd Leen, OGI  
Treasurer - Rodney Goodman, Caltech  
Local Arrangements - Lori Pratt,  
Colorado School of Mines  
Tutorials Chairs - Stephen Hanson, Siemens and  
Gerald Tesauro, IBM  
Contracts - Stephen Hanson, Siemens and  
Scott Kirkpatrick, IBM  
Government & Corporate Liaison -  
John Moody, OGI  
Overseas Liaisons - Marwan Jabri, Sydney Univ.,  
Mitsuo Kawato, ATR, Alan Murray, Univ. of  
Edinburgh, Joachim Buhmann, Univ. of Bonn,  
Andreas Meier, Simon Bolivar Univ.

*John B. Tesauro*