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9th Annual Conference
on

NEURAL INFORMATION PROCESSING SYSTEMS:
NATURAL AND SYNTHETIC

Tutorials

November 27, 1995
Denver Marriott City Center, Denver, Colorado

Formal Conference Sessions

November 28 – 30, 1995
Denver Marriott City Center, Denver, Colorado

Post-Meeting Workshops

December 1–2, 1995
Marriott Hotel, Vail, Colorado

◇ The program stresses interdisciplinary interactions.
◇ All papers will be thoroughly refereed.
◇ Roughly one-third of submitted papers are accepted for oral or poster presentations.
◇ All reviewer comments will be returned to submitting authors.
◇ NIPS is a single-track conference; there are no parallel sessions.

Sponsored by NEURAL INFORMATION PROCESSING SYSTEMS Foundation, Inc.
Additional sponsorship of student and young investigator travel awards provided by
Advanced Research Projects Agency and Office of Naval Research.

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PROGRAM HIGHLIGHTS

Approximately 460 papers have been submitted; each is being reviewed by three referees. Roughly 30 papers will be selected for oral presentations; another 110 will be presented as posters. All accepted papers will appear in the proceedings. A number of invited talks will survey active areas of research and lead off the sessions. These include:

John H. McMasters, (Banquet Speaker) - Boeing Commercial Aircraft Company
"Origins and Future of Flight: A Paleoecological Perspective"

Bruce Rosen, Massachusetts General Hospital
"Mapping Brain Function with Functional Magnetic Resonance Imaging"

David Heckerman, Microsoft
"Learning Bayesian Networks"

Brian Ripley, Statistics, Oxford
"Statistical Ideas for Selecting Network Architectures"

Thomas McAvoy, University of Maryland
"Application of Neural Networks in the Chemical Process Industries"

Elizabeth Bates, UCSD, Cognitive Science Department
"Brain Organization for Language in Children and Adults"

PROGRAM EVENTS

Sunday, 11/26	6:00 – 10:00 p.m.	Registration
Monday, 11/27	8:30 – 6:00 p.m.	Registration
	9:30 - 5:30 p.m.	Tutorials
	6:30 p.m.	Reception & Conference Banquet
Tuesday and	8:30 – 12:00 p.m.	Sessions
Wednesday	12:00 – 2:00 p.m.	Poster Previews, Demos
11/28–11/29	2:00 – 5:30 p.m.	Sessions
	7:30 - 10:00 p.m.	Poster Sessions, Refreshments
Thursday, 11/30	8:30 – 1:00 p.m.	Sessions
	5:00 p.m.	Registration, Reception at Vail
Friday, 12/1	7:30-9:30 a.m.;	
	4:30-6:30 p.m.	Workshop Sessions
	7:00 p.m.	Workshop Banquet
Saturday, 12/2	7:30-9:30 a.m.;	
	4:30-6:30 p.m.	Workshop Sessions
	7:00 p.m.	Workshop Wrap-up Meeting

CONFERENCE PROCEEDINGS

The conference proceedings, *Advances in Neural Information Processing Systems 8*, edited by D. Touretzky, M. Mozer and M. Hasselmo, should be available in early April, 1996. Attendees will receive a free copy; for additional copies write to MIT Press, 55 Hayward Street, Cambridge, MA 02142-0343, E–mail mitpress-orders@mit.edu, or call (800) 356-0343. Every paper will be allotted up to eight pages in the proceedings. Camera–ready copy must be turned in to the publisher by January 8, 1995. Author kits and formatting instructions will be mailed before the conference.

REGISTRATION, ACCOMMODATIONS AND TRANSPORATION

MEETING REGISTRATION: The form on page 7 should be returned with payment. Note that there is a price reduction for early registration (by Oct. 28). Registration includes the welcoming reception, Monday night banquet, and continental breakfast all three days. Registration for the tutorials, workshops, and purchase of discount lift tickets requires payment of additional fees.

HOTEL REGISTRATION: The meeting will be held at the Denver Marriott City Center. We have negotiated a special conference rate of $76.00 per night single, $86.00 double. For reservations, call (800) 228–9290 and say that you are attending NIPS*95. The Denver Marriott City Center may be contacted directly at (303) 297–1300 for further information. The Marriott City Center is located in the heart of Denver and is easily accessible by taxi or local airport shuttle services.

AIR TRAVEL TO DENVER: United Airlines is offering discounted airfares to NIPS at their conference number, (800) 521-4041. Make your reservation with this number; the ticket can be mailed to you or your local travel agent can print it out. You must give our meeting ID code: 553SP.

GROUND TRANSPORT TO/FROM VAIL: Call Colorado Mountain Express (800) 525–6363 at least 48 hours in advance to arrange bus transportation from the Denver Marriott to Vail. The NIPS group rate is $37.00 one-way; there will be a single pick up at 2 p.m. on Thursday, Nov. 30. Airport transportation to and from Vail is available from Colorado Mountain Express, and Vans To Vail (800) 222–2112. Rental cars and vans are available from Hertz, located near the Marriott.

DRIVING DIRECTIONS FROM DENVER MARRIOTT TO VAIL MARRIOTT: Take I–25 North to I–70 West. Follow I–70 West for about 90 miles, and get off at second Vail exit (Exit 176). Turn left and drive under the highway, and then make a right turn at the four-way stop sign. Drive 1/2 mile parallel to the highway and turn left on West Lions Head Circle. The Vail Marriott is on the left side of the road. Parking is just beyond the hotel; the group rate for parking is $7.00 per day. Valet parking is also available at the main hotel entrance.

FINANCIAL SUPPORT

Limited funds will be available from the NIPS Foundation to support the participation of young investigators, post-doctoral fellows, and graduate students. Awards will be based on both merit and need. The amount of aid will generally not exceed $400 per participant; increased amounts may be available for participants traveling from overseas. Apply as soon as possible AFTER notification of acceptance or rejection of submitted papers (mid-August) by sending (1) a 1–page resume (2) a 1–page justification (e.g. author, presenter, etc.), preferably by E–mail to the meeting treasurer: John Lazzaro (lazzaro@cs.berkeley.edu) Computer Science Division, University of California, Berkeley, CA 94720-1776, USA. Deadline for application is September 23, 1995. Notification will be shortly thereafter. Applicants are also encouraged to contact the Local Arrangements Chair, Manavendra Misra (mmisra@mines.colorado.edu) about the possibility of doing volunteer work at the meeting in exchange for waivers of registration fees.

POST-MEETING WORKSHOPS

November 30 – December 2, 1995

Registration for the workshops is optional. It includes the welcome reception, two continental breakfasts and one banquet dinner. The workshops will have morning (7:30-9:30 a.m.) and afternoon (4:30-6:30 p.m.) sessions each day and will be followed by a summary session at 7:00 p.m. on the final day. Early registration is strongly encouraged, as we may have to limit attendance. Early room reservations at Vail are also strongly encouraged. Below is a partial list of this year's workshops.

- Noisy Time Series
- Neural Hardware Engineering
- Symbolic Dynamics in Neural Processing
- Neural Information and Coding
- Network Models of Cortical Function
- Robot Learning
- The Dynamics of On-Line Learning
- Neural Networks for Signal Processing
- Object Features for Visual Shape Representation
- Benchmarking of NN Learning Algorithms
- Prospects for Neural Human-Machine Interfaces
- Modeling the Mind: Large Scale Research Projects
- Hybrid HMM/ANN Systems for Sequence Recognition
- Transfer of Knowledge in Inductive Systems
- Optimization Problem Solving with Neural Nets
- Statistical and Structural Models in Network Vision
- Learning in Bayesian Networks and Other Graphical Models
- Knowledge Acquisition, Consolidation, and Transfer within Neural Networks
- Dealing with Incomplete Data in Classification and Regression
- Topological Maps for Density Estimation, Regression and Classification

WORKSHOPS LOCATION:

The Marriott Hotel in Vail, Colorado will be the site of the Neural Information Processing Systems workshops. Vail is 90 miles west of Denver and offers fine early season skiing and many excellent restaurants. NIPS has been able to secure discount lodging rates. Please contact the hotels listed below.

ACCOMMODATIONS:

VAIL MARRIOTT: $82.00 per night, Single or Double. Reservations: (800) 648-0720. These rates are per night and do not include local taxes; be sure to mention NIPS*95 when making your reservations. Rooms will be held for us only until November 1.

DESTINATION RESORTS offers condos in the immediate vicinity of the Vail Marriott, which will be advantageous for groups of 4 or more people. They are holding a block of rooms for NIPS attendees. Call them at (800) 322–8245 to work out the size and type of accommodation that you need.

DISCOUNT LIFT TICKETS:

Workshop attendees will be able to purchase discount lift tickets for Vail and Beaver Creek. Rates of $32 per day will be available for 2-4 day tickets.

TUTORIAL PROGRAM

November 27, 1995

Session I: 9:30–11:30 a.m.

"Functional Anatomy of Primate Vision"
Gary Blasdel, Harvard Medical School

"Neural Networks for Identification and Control"
Kumpati Narendra, Yale University

Session II: 1:00–3:00 p.m.

"Cortical Circuits in a Multichip Communication Framework"
Misha Mahowald, Institute for Neuroinformatics

"Computational Learning and Statistical Prediction"
Jerome Friedman, Stanford University

Session III: 3:30–5:30 p.m.

"Unsupervised Learning Procedures"
Geoffrey Hinton, University of Toronto

"Option Pricing in Modern Finance Theory and the Relevance of Artificial Neural Networks"
Halbert White, University of California at San Diego

NIPS*95 REGISTRATION FORM

Please complete the form below, and mail it with your payment in full to:

NIPS*95 Registration
Dept. of Mathematical and Computer Sciences
Colorado School of Mines
Golden, CO 80401 USA

For questions regarding registration, call (303) 384-2092 or send e-mail to nips95@mines.colorado.edu.

Last Name First Middle

Professional Affiliation

Street Address and Internal Mail Code

City State Zip

Country (if not US) E-mail Telephone

REGISTRATION FEES:

Conference: (includes Proceedings, Reception, Banquet and 3 Continental Breakfasts).

- ☐ Regular $285.00 ($360.00 after Oct. 28, 1995)
- ☐ Full-time students, with I.D. $100.00 ($150.00 after Oct. 28, 1995)

Post-Meeting Workshops:

- ☐ Regular $150.00 ($200.00 after Oct. 28, 1995)
- ☐ Full-time students, with I.D. $ 75.00 ($125.00 after Oct. 28, 1995)

Tutorials:

- ☐ Regular $150.00
- ☐ Full-time students, with I.D. $ 50.00

Enclosed is a check or money order in U.S. Dollars for $________.
(Note: Students must include photocopy of valid ID with registration form and present ID at the conference registration desk.)

PLEASE MAKE CHECK PAYABLE TO THE NEURAL INFORMATION PROCESSING CONFERENCE.
(Hotel room arrangements must be made directly with the Marriott Denver City Center and Vail Marriott.)

Additional conference and workshop information is available via the World Wide Web on the NIPS home page at `http://www.cs.cmu.edu/Web/Groups/CNBC/nips/NIPS.html`.