

NIPS '97

Neural Information Processing Systems

TUTORIALS: DEC. 1 DENVER, CO
CONFERENCE: DEC. 2-4 DENVER, CO
WORKSHOPS: DEC. 5-6 BRECKENRIDGE, CO

www.cs.cmu.edu/Groups/nips
Email: nipsinfo@salk.edu
Tel: +1-319-465-5585

INVITED TALKS

KEN NAKAYAMA: PSYCHOLOGICAL STUDIES OF VISUAL PERCEPTION (BANQUET)
JOHN HOPFIELD: COMPUTING WITH ACTION POTENTIALS
JOHN S. KAUSER: ODOR CODING BY THE OLFACTORY SYSTEM: DISTRIBUTED PROCESSING IN BIOLOGICAL AND ARTIFICIAL SYSTEMS
RICHARD LIPTON: DNA²: DNA COMPUTATION: A POTENTIAL KILLER APPLICATION?
MANFRED WARMUTH: RELATIVE LOSS BOUNDS, THE MINIMUM RELATIVE ENTROPY PRINCIPLE AND EM

WORKSHOPS

SUPPORT VECTOR LEARNING MACHINES
THE NEUROPHYSIOLOGY OF CENTRAL AUDITORY PROCESSING (2 DAYS)
NON-LINEAR, DYNAMICAL VISION: LESSONS FROM STRIATE CORTEX
LEARNING DYNAMICAL DATA STRUCTURES: FROM SEQUENCES TO GRAPHS
DIFFERENT VIEWS ON INFERENCE AND LEARNING IN GRAPHICAL MODELS
REAL-WORLD APPLICATIONS OF VISUAL MODELING
IMPLEMENTATION OF ACTIVE PERCEPTION SYSTEMS
ADVANCES IN AUTOENCODER/AUTOASSOCIATOR-BASED COMPUTATIONS
DENDRITIC COMPUTATION PROCESSING
ANALYSIS OF BRAIN IMAGING DATA
NEUROSTATISTICS OF CELL ASSEMBLIES
NEURAL INFORMATION AND CODING
IMITATION LEARNING
NEURAL MODELS OF CONCEPT LEARNING
INTERFACING MODELS OF LANGUAGE
CAN ARTIFICIAL CEREBELLAR MODELS COMPETE TO CONTROL ROBOTS?
COMPUTATIONAL MODELS OF EPISODIC MEMORY AND HIPPOCAMPAL FUNCTION

NIPS IS THE PREMIER
INTERDISCIPLINARY CONFERENCE
ON ALL ASPECTS OF NEURAL
COMPUTATION. THIS HIGHLY
REFEREED SINGLE-TRACK CON-
FERENCE (ORAL AND POSTER)

FOLLOWS A DAY OF TUTORIALS
AND IS FOLLOWED BY TWO
DAYS OF FOCUSED WORKSHOPS
AT A WORLD CLASS SKI
RESORT. TOPICS INCLUDE
LEARNING ALGORITHMS, THEORY,
APPLICATIONS, HARDWARE
IMPLEMENTATIONS, COGNITIVE
SCIENCE, NEUROSCIENCE,
CONTROL, SPEECH, VISION AND
SIGNAL PROCESSING.

TUTORIALS

DANA BALLARD: THE BRAIN'S TEMPORAL HIERARCHIES
MARTHA J. FARAH: HIGH-LEVEL VISION AND THE HUMAN BRAIN
MICHAEL I. JORDAN: AN INTRODUCTION TO GRAPHICAL MODELS
DAVID J.C. MACKAY: GAUSSIAN PROCESSES
A REPLACEMENT FOR SUPERVISED NEURAL NETWORKS?
VLADIMIR VAPNIK: SUPPORT VECTOR
METHOD OF FUNCTION ESTIMATION
MATTHEW A. WILSON: MULTINEURONAL RECORDING,
MOLECULAR GENETICS, BEHAVIOR AND COMPUTATION:
NEW APPROACHES IN THE STUDY OF NEURAL FUNCTION

ORGANIZATION COMMITTEE

GENERAL CHAIR: MICHAEL I. JORDAN
PROGRAM CHAIR: MICHAEL KEARNS
WORKSHOPS: STEVEN NOWLAN, RICHARD ZEMEL
TUTORIALS: SATINDER SINGH
PUBLICITY: TONY BELL
PUBLICATIONS: SARA SOLLA
TREASURER: BARTLETT MEE
LOCAL ARRANGEMENTS: ARUN JAGOTA
NIPS WEBMASTER: L. DOUGLAS BAKER
GOVERNMENT LIASON: JOHN MOODY
CONFERENCE COORDINATOR: DENISE PRULL
CONTRACTS: STEVEN HANSON, SCOTT KIRKPATRICK, GERALD TESAURO
PROGRAM COMMITTEE: MICHAEL KEARNS, SUE BECKER,
JOACHIM BUHMANN, TOM DIETTERICH, RICHARD LIPPMANN,
LAWRENCE SALLI, JUDE SHAYLAK, RICH SUTTON, TALI FISHBY,
MICHAEL TURMON, PAUL VIOLA, JOHN WAWRZYNEK, TONY ZADOR
POSTER ART: JOHN LOFTUS