

NNAM 2006 Final Program

November 20-24, 2006

Technical Program at Glance

Hour	Tutorials	Technical Part			
	Tuesday	Wednesday	Thursday	Friday	
08:00-08:20	Registration	Registration	Registration	Registration	
08:20-08:40					
08:40-09:00					
09:00-09:20	Tutoriales	Opening	Invited Talk Juan Vargas Data Mining	Invited Talk Manuel Reyes Gómez Probabilistic Graphical Models for Audio and Biology	
09:20-09:40			Hall "B", CC JTB	Technical Session Data Analysis, Pattern Recognition and Self-Organization Annex Auditorium, NLST	Hall "B", CC JTB
09:40-10:00					
10:00-10:20					
10:20-10:40		Invited Talk Bernard Widrow Cognitive" Memory and its Applications	Break	Break	Technical Session
10:40-11:00					
11:00-11:20					
11:20-11:40		Hall "B", CC JTB	Technical Session Real World Applications Annex Auditorium, NLST	Break	Vision and Image Processing Annex Auditorium, NLST
11:40-12:00					
12:00-12:20					
12:20-12:40		Lunch Time	Lunch Time	Lunch Time	Lunch Time
12:40-13:00					
13:00-15:00					
15:00-15:20	Tutorials	Technical Session Neural Control and Robotic Applications Annex Auditorium, NLST	Technical Session Associative Memories Annex Auditorium, NLST	Break	
15:20-15:40					
15:40-16:00					
16:00-16:20		Break	Invited Talk Alexander Veindenbaum Architectural Techniques for Reducing Energy Consumption in Associative Data Caches	Hall "B", CC JTB	
16:20-16:40					
16:40-17:00					
17:00-17:20		Invited Talk Armando Guevara Is-Net.Net: Spatially Enabled Information Services	Invited Talk Jesús Cardeñosa Universal Networking Language	Break	Invited Talk César Galindo Legaria Query Processing in Databases Systems – Successful Technologies and Open Problems
17:20-17:40					
17:40-18:00					
18:00-18:20		Hall "B", CC JTB	Hall "B", CC JTB	Hall "B", CC JTB	
18:20-18:40					
18:40-19:00					
19:00-XX:XX				Closure	

Annex Auditorium, NLST = Annex Auditorium, National Library of Science and Technology

Hall "B", CC JTB = Hall "B", Cultural Center "Jaime Torres Bodet"

NNAM 2006 Final Technical and Cultural Program

Monday 20



Visit to the Xochicalco, Taxco and Cacahuamilpa Caves, from 06:30 to 24:00

(More precise information to be posted soon at website)



Tuesday 21

Tutorials to be held at CIC-IPN from 09:00 to 19:00

or

Visit to the Largest in the World Antropological Museum from 08:00 to 17:00

(More precise information to be posted soon at website)



or

Visit to the Xochicalco, Taxco and Cacahuamilpa Caves, from 06:30 to 24:00

(More precise information to be posted soon at website)



Wednesday 22

08:00 – 09:40 (Main Hall of Cultural Center “Jaime Torres Bodet” and Main Hall of NLST)

Registration

09:40 – 11:00 (Hall “B”, Cultural Center “Jaime Torres Bodet”)

Opening

11:00 – 12:00 (Hall “B”, Cultural Center “Jaime Torres Bodet”)

Invited Talk: Bernard Widrow

“Cognitive” Memory and its Applications

Chair: Humberto Sossa



12:00 – 13:00 (Annex Auditorium, National Library of Science and Technology)

Technical Session: Algorithms and Learning

Chair: Jaime Mora

Increasing Boltzmann Machine Learning Speed and Accuracy with the High Order Decimation Method

Enric Farguell, Eduardo Gómez and Ferran Mazzanti

Bounded Weights Trajectories for Neural Network State Estimation

Isaac Chairez, Alexander Poznyak and Tatyana Poznyak

Hepatitis C Viral Load Control Applying Hamilton-Jacobi And Sliding Mode Techniques

Ramón F. Miranda, Isaac Chairez and Agustín Cabrera

13:00 – 15:00

Lunch Time

15:00 – 16:40 (Annex Auditorium, National Library of Science and Technology)

Technical Session: Neural Control and Robotic Applications

Chair: Eduardo Gómez

Local Optimal Control Based on Neural Network Observer States <i>Nadezhda Aguilar, Agustin Cabrera and Isaac Chairez</i>
A Direct Torque Vector Neural Control of a Three Phase Induction Motor <i>Ieroham S. Barouh, Carlos R. Mariaca and Irving P. de la Cruz</i>
Neural Network Model for Balancing a Biped Robot <i>Daniel Zaldivar, Erik Cuevas, Marco A. Pérez and Raul Rojas</i>
RNN Identification and Control of Nonlinear Plants Using the Recursive Marquardt Algorithm <i>Ieroham Barouh, Saul Escalante and Carlos R. Mariaca</i>
Forward Models and the Prediction of Undesired Situations <i>Bruno Lara, Juan Manuel Rendon and Marcos Capistran</i>

17:00-18:00 (Hall “B”, Cultural Center “Jaime Torres Bodet”)

Invited Talk: Armando Guevara →

Is-Net.Net: Spatially Enabled Information Services

Chair: Serguei Levahckine



Thursday 23

08:00 – 09:00 (Main Hall of National Library of Science and Technology)

Registration

09:00-10:00 (Hall “B”, Cultural Center “Jaime Torres Bodet”)

Invited Talk: Juan Vargas →

Data Mining

Chair: Jesús Olivares



10:00 – 11:20 (Annex Auditorium, National Library of Science and Technology)

Technical Session: Data Analysis, Pattern Recognition and Self-Organization

Chair: Humberto Sossa

Analysis and Classification of Car Engine Sounds to Diagnose Failures with the Help of Neural Networks <i>Luis A. Méndez and Orión F. Reyes</i>
Personalizing Google’s Search Results using Naïve Bayesian Probabilistic Model <i>Srinivasa K G, Srinivas Kumar M, Vinay T C, Venugopal K R and Lalit M Patnaik</i>
PM10 Classification with SOM Neural Networks for Air Quality Levels Estimation <i>Maria G. Cortina, J. Miguel Barrón, Sergio Ledesma, D. Andina and A. Vega</i>
Effect of Long-delay Connections to Realize a Self-Organization of Firing Patterns that Vary Smoothly in Space <i>Toshio Akimitsu, Yoichi Okabe and Akira Hirose</i>

11:40 – 13:00 (Annex Auditorium, National Library of Science and Technology)

Technical Session: Real World Applications

Chair: Ieroham S. Baruch

The Use of Artificial Neural Networks in Modeling the High-Pressure, Suspensive Waterjet Cutting Process of Syenite
Andrzej Perec, Grzegorz Dzuga and Mateusz Ruzylko

Physical Model-Free Observer for Nuclear Reactors using Differential Neural Networks with Sliding Mode Learning
José H. Pérez and Alexander Poznyak

Unusual Changes of Consumption Detection in Mobile Phone Users
Paola Britos, Hernan Grosser, Enrique Sierra and Ramon Garcia

Selecting Pedagogical Protocols Using SOM
Fernando Salgueiro, Zulma Cataldi, Paola Britos, Enrique Sierra and Ramon Garcia

13:00 – 15:00

Lunch Time

15:00 – 16:00 (Annex Auditorium, National Library of Science and Technology)

Technical Session: Associative Memories

Chair: Ieroham S. Baruch

Associative Memory: Information and Topology
David Dominguez, Kostadin Koroutchev, Eduardo Serrano and Francisco Rodríguez

Alternative Algorithm for Multi-Layered Morphological Networks
Ricardo Barrón, Humberto Sossa and Benjamín Cruz

Efficient Codebooks for Visual Concept Recognition by ASSOMs Activation
Grégoire Lefebvre and Christophe Garcia

17:00-18:00 (Hall “B”, Cultural Center “Jaime Torres Bodet”)

Invited Talk: Jesús Cardeñoza

Universal Networking Language

Chair: Alfonso Ramírez



Friday 24

08:00 – 09:00 (Main Hall of National Library of Science and Technology)

Registration

09:00-10:00 (Hall “B”, Cultural Center “Jaime Torres Bodet”)

Invited Talk: Manuel Reyes

Probabilistic Graphical Models for Audio and Biology

Chair: Sergio Suárez



10:00 – 11:00 (Annex Auditorium, National Library of Science and Technology)

Technical Session: Support Vector Machines

Chair: Patricia Rayón

Drowsy Driver Detection Using Wavelets and Support Vector Machines
Rodolfo E. Ibarra, Miguel González, Ariel L. García, Neil Hernández and Jaime Mora

Isolated Character Recognition by using Support Vector Machines and Optimal Feature Vectors
Hermenegildo Cisneros, Ricardo Barrón and Benjamín Cruz

Heuristics to Reduce the Training Time of SVM Algorithm
Ariel L. García, Neil Hernández, Miguel González, Rodolfo E. Ibarra and Jaime Mora

11:20 – 12:20 (Annex Auditorium, National Library of Science and Technology)

Technical Session: Vision and Image Processing

Chair: Jaime Mora

Performance of Lossy Image Compression Coders on Textures
Osslan O. Vergara, Raúl Pinto and José Ruíz

SOFM Neural Network Texture Segmentation
Erik Cuevas, Daniel Zaldivar, Marco A. Pérez and Raul Rojas

Licence Plate Location and Recognition Using Decision Regions of Color with Genetic Algorithms and Neural Networks
Gilberto A. Apodaca and Patricia Rayón

13:00 – 15:00
Lunch Time

16:00 – 17:00 (Hall “B”, Cultural Center “Jaime Torres Bodet”)

Invited Talk: Alexander Veindenbaum

Architectural Techniques for Reducing Energy Consumption in Associative Data Caches

Chair: Oscar Camacho



17:20 – 18:20 (Hall “B”, Cultural Center “Jaime Torres Bodet”)

Invited Talk: César Galindo Legaria

Query Processing in Databases Systems – Successful Technologies and Open Problems

Chair: Alexander Gelbukh



18:20 – 19:00 (Hall “B”, Cultural Center “Jaime Torres Bodet”)

Closure

Saturday 25

Excursion to the Legendary Teotihuacan Pyramids from 8:00 to 19:00

(More precise information to be posted later at website)



Cultural Center “Jaime Torres Bodet”
(Centro Cultural “Jaime Torres Bodet”)
Unidad Profesional “Adolfo López Mateos”



National Library of Science and Technology
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