



**Mexican Workshops on Artificial Intelligence**  
November 5 – 6, 2007  
Aguascalientes City, MEXICO

WORKSHOP PROGRAM

SPONSORS:

Mexican Society of Artificial Intelligence (SMIA)  
Tecnológico de Monterrey: Campus Ciudad de México (ITESM – CEM)  
Instituto de Investigaciones Eléctricas (IIE)

LOCATION:

Universidad Tecnológica de Aguascalientes (UTA)  
Av. Juan Pablo II #1302, Fracc. Ex-hacienda la Cantera  
CP: 20206, Aguascalientes, Mexico  
Phone: 449 9105000 or 449 976-07-29

ORGANIZATION:

WORKSHOPS CHAIRS:	Raúl Monroy, ITESM – CEM Gustavo Arroyo-Figueroa, IIE
LOCAL CHAIRS:	Víctor Manuel Gonzalez, UTA Eduardo Serna Perez, UAA
WORKSHOPS:	
Service Robots	Enrique Sucar, INAOE J. Savage, UNAM E. Morales, INAOE
Data Mining Applications & Current Trends	Manuel Mejía, IIE E. Morales, INAOE
Applications of Artificial Intelligence	G. Arroyo-Figueroa, IIE
Computer security	R. Monroy, ITESM – CEM Carlos Mex-Pereda, ITESM-MTY

---

---

## MICAI 2007: Workshop on Applications of Artificial Intelligence

---

Tuesday November 6, 2007

Universidad Tecnológica de Aguascalientes (UTA)

Edificio de Vinculación, Aula Panisoptica

---

### Program

---

9:15 - 9:30 Opening Remarks

9:30 - 11:30 Session 1.

- \* Intelligent Supervisory Control System for High Speed Machining  
A. Vallejo, R. Morales-Menendez, J. R. Alique (ITEMS Campus Mty, Mex.)
- \* Proposal for the detection of noise defective DC motors using an  
Architecture based on Neural Networks  
F. Castillo, O. Pizaño (UASLP, Mex.)
- \* AsistO: An Intelligent Assistant for Power Plant Operations  
A. Reyes, P. Ibarguengoytia (IIE, Mex.)
- \* Intelligent applications for diagnosis, prediction and control of Power Plants  
G. Arroyo-Figueroa (IIE, Mex)

11:30 - 12:00 Coffee break

12:00 - 14:00 Session 2.

- \* Electric Generator Diagnosis with two Artificial Neural Networks  
M. Mejia-Lavalle (IIE, Mex)
- \* A Hybrid Method of Rough K-means Algorithm and Particle Swarn  
Optimization for Image Classification  
H. Purnawan, Chih-Cheng Hung (SPSU, USA)
- \* Image Processing for In Vitro Cell Tracking  
E. Perez-Careta, J. G. Aviña-Cervantes, F. Ambriz, D. May, J.J. Sanchez,  
J. Escobedo, O. Debeir, M. Torres (UdeG, INAOE, UAEM, Mex)
- \* Imagen Segmentarion using Ant Colony Optimization  
M. Zhang, Chih-Cheng Hung (SPSU, USA)

14:00 – 14:15 Conclusions