

# MIWAI 2012 Program

**The 6<sup>th</sup> Multi-Disciplinary International  
Workshop on Artificial Intelligence  
27-28 December, 2012  
Ho Chi Minh City, Vietnam**

## Conference Hosts



**Nong Lam University  
Hochiminh City, Viet Nam**



**University of Technology, Ho Chi Minh  
City, Vietnam**



**Maharakham University, Thailand**



**University of Hyderabad, India**

## **Local Organizing Committee**

Nguyen Hay (Nong Lam University, Vietnam)

Nguyen Kim Loi (Nong Lam University, Vietnam)

Hoang Thi Thuy(Nong Lam University, Vietnam)

Tho Quan (Ho Chi Minh City University of Technology, Vietnam)

## **Steering Committee**

### ***Members***

ArunAgarwal (University of Hyderabad, India)

RajkumarBuyya (University of Melbourne, Australia)

Jerome Lang (CNRS, Universite Paris-Dauphine, France)

James Peters (University of Manitoba, Canada)

WiratPonngsiri (Mahasarakham University, Thailand)

SrinivasanRamani (IIT Bangalore, India)

C RaghavendraRao (University of Hyderabad, India)

Leon Van Der Torre (University of Luxembourg, Luxembourg)

### **Conveners**

Richard Booth (University of Luxembourg, Luxembourg)

ChattrakulSombattheera (Mahasarakham University, Thailand)

### **General Co-Chairs**

Nguyen Kim Loi (Nong Lam University, Vietnam)

ChattrakulSombattheera (Mahasarakham University, Thailand)

### **Program Co-Chairs**

Tho Quan (Ho Chi Minh City University of Technology, Vietnam)

Rajeev Wankar (Univerisity of Hyderabad, India)

### **Publicity Committee**

Pham Cong Thien (Nong Lam University, Vietnam)

PanichSudkhot (Mahasarakham University, Thailand)

# MIWAI 2012 Program

Thursday, December 27, 2012  
PLENARY SESSION

8:00-9:00 Registration

9:00-10:00 Inauguration

*Moderator: Prof. Tho Quan*

<b>Presenter</b>	<b>Institution</b>	<b>Topic</b>
Nguyen Kim Loi and Chattrakul Sombatheera	Nong Lam University, Ho Chi Minh City, Vietnam and Mahasarakham University, Thailand	Greetings, welcome.
Prof. Nguyen Hay	Rector Nong Lam University, Ho Chi Minh City, Vietnam	Opening Speech

10:00-11:00

**Invited Talk Session – 1**

*Chair: Prof. Nguyen Kim Loi*

<b>Presenter</b>	<b>Institution</b>	<b>Topic</b>
Keynote Speaker Prof. NitinTripathi	Associate Dean, School of Engineering and Technology Coordinator, Remote Sensing and GIS Editor-in-Chief, International Journal of Geo-informatics Asian Institute of Technology	Artificial Neural Network for Snow Cover Forecasting

**Tea Break**  
**11:00-11:30**

11:30-12:00

**Technical Session – 1**

*Chair: Prof. Chattrakul Sombatheera*

<b>Presenter</b>	<b>Institution</b>	<b>Topic</b>
BoontaweeSuntisrivaraporn and SuwanTongphu	Sirindhorn International Institute of Technology, Thailand	Toward Composite Object Classification Using a Probabilistic Inference Engine
Grzegorz Polakow and Mieczyslaw Metzge	Silesian University of Technology, Poland	Agent-based control system for sustainable wastewater treatment process

Thu-Le Pham and Katsumi Inoue	Information Technology University, Vietnam	Minimal Generalization for Conjunctive Queries
MariuszKlec	Polish-Japanese Institute of Information Technology, Poland	Evaluation of Jamendo Database as Training Set for Automatic GenreRecognition

***Lunch Break***  
**12:30 - 14:00**

**14:00-15:00**  
**Special Session**  
*Chair: Prof. Patrick Doherty*

<b>Presenter</b>	<b>Institution</b>	<b>Topic</b>
Prof. Nguyen Kim Loi	Research Center for Climate Change (RCCC) Nong Lam University, Ho Chi Minh City, Vietnam	Online Supporting System Flood Warning and Climate Change in the Central Vietnam

**15:00-16:00**  
**Technical Session – 2**  
*Chair: Prof. Le Hoai Bac*

<b>Presenter</b>	<b>Institution</b>	<b>Topic</b>
Truong Cao Duy and Anh Duong Tuan	Ho Chi Minh University of Natural Resources and Environment, Vietnam	Time Series Prediction Using Motif Information
Doi Tran-Cong, Tho Quan-Thanh and Anh Duong-Tuan	Ho Chi Minh City University of Technology, Vietnam	Efficient Handling Of 2D Image Queries Using VPC+-tree
Gangin Lee and Unil Yun	Department of Computer Science, Chungbuk National University, Korea Republic of	Mining weighted frequent sub-graphs with weight and support affinities
KeonMyung Lee, Kyung Mi Lee and Chan Hee Lee	Chungbuk National University, Korea	Mining Frequent Common Families in Trees

***Tea Break***

**16:00 - 16:30**

**16:30-17:30**

**Technical Session – 3**

*Chair: Prof. Duong Tuan Anh*

<b>Presenter</b>	<b>Institution</b>	<b>Topic</b>
Nam Nguyen Vinh and Bac Le Hoai	Vietnam Informatics And Mapping Corporation	Simple Spatial Clustering Algorithm based on R-tree
Sai Prasad P.S.V.S and Raghavendra Rao Chillerige	University of Hyderabad, India	Novel Granular Framework for Attribute Reduction in Incomplete Decision Systems
Sharmila Wagh, Gaurav Neelwarna and Dr. Satish Kolhe	North Maharashtra University, India	A Comprehensive Analysis and Study in Intrusion Detection System Using KNN Algorithm
Łukasz Wróbel, Marek Sikora and Adam Skowron	Silesian University of Technology, Poland	Algorithms for filtration of unordered sets of regression rules

***Banquet***

**17:30 - 20:30**

**Friday, December 28, 2012**

**9:00-10:00**

**Invited Talk Session – 3**

*Chair: Prof. Katsumi Inoue*

<b>Presenter</b>	<b>Institution</b>	<b>Topic</b>
Keynote Speaker Prof. Patrick Doherty	Professor of Computer Science, Linköping University, Sweden	Leveraging KR Techniques in Autonomous Unmanned Aircraft Systems

**10:00-11:00**

**Technical Session – 4**

*Chair: Prof. Sai Prasad*

<b>Presenter</b>	<b>Institution</b>	<b>Topic</b>
David Kinny	Kyoto University, Japan	Monte-Carlo Search for Snakes and Coils
Dinh Tran Thi, Phuc Nguyen Hong and Vinh Dinh Quang	University of Agriculture and Forestry, Vietnam	Stereo Matching by Fusion Local Methods and Spatial Weighted Window
Phuc Nguyen Hong, Dinh Tran Thi and Vinh Dinh Quang	University of Science, Vietnam	Local Stereo Matching by Joining Shiftable Window and Non-parametric Transform
ChittiKokil Kumar, ArunAgarwal and RaghavendraRao C	University of Hyderabad, India	Color and Texture Image Segmentation

**Tea Break**  
**11:00 - 11:30**

**11:30-12:30**

**Technical Session – 5**

*Chair: Prof. Boontawee Suntisrivaraporn*

<b>Presenter</b>	<b>Institution</b>	<b>Topic</b>
MoulayRachidDouiri and Mohamed Cherkaoui	Mohammadia Engineering School, Department of Electrical Engineering, Morocco	Evolutionary Multi-Objective Optimization based Proportional Integral Controller Design for Induction Motor Drive
HamidoHourani, Eckart Hauck and Sabina Jeschke	Institute of Information management in mechanical engineering, Germany	Interruptibility and its negative impact on graph exploration missions by a team of robots
N A B SankarChebolu, Rajeev Wankar and C RaghvendraRao	ANURAG, India	Tuning the Optimization Parameter Set for Code Size

**Lunch Break**  
**12:30 - 14:00**

**14:00-15:15**

**Technical Session – 6**

*Chair: Prof. Tho Quan*

<b>Presenter</b>	<b>Institution</b>	<b>Topic</b>
Dariusz Choinski, Mieczyslaw Metzger, Witold Nocon, Grzegorz Polakow and Piotr Skupin	Silesian University of Technology, Poland	AI-based support for experimentation in an environmental biotechnological process
Omar S. Soliman and Aliaa Rassem	Cairo University, Faculty of Computers and Information, Cairo, Egypt	Correlation Based Feature Selection Using Quantum Bio Inspired Estimation of Distribution Algorithm
P Pavan Kumar, Arun Agarwal and Chakravarthy Bhagvati	University of Hyderabad, India	A Structure Based Approach for Mathematical Expression Retrieval
Mauro Vallati	University of Brescia, Italy	A Guide to Portfolio-based Planning

*Tea Break*  
**15:15 - 15:45**

**15:45-16:45**

**Technical Session – 7**

*Chair: Prof. David Kinny*

<b>Presenter</b>	<b>Institution</b>	<b>Topic</b>
Fan Cai, Nhien An Le Khac and M-TaharKechadi	Software School, Computer Science, Fudan University, China	An Integrated Classification Model for Financial Data Mining
Junghoon Lee, Gyung-Leen Park and Hye-Jin Kim	Jeju National University, Korea Republic of	Relocation action planning in electric vehicle sharing systems
Darko Brodic, Zoran Milivojevic, Dejan Tanikic and Dragan Milivojevic	University of Belgrade, Technical Faculty in Bor, Serbia	An Approach for Tuning the Parametric Water Flow Algorithm based on ANN

Valedictory  
**16:45 - 17:15**

*End of Conference Celebration*