Selected Scholarly Contributions [Data Provided by Scopus]

Naim, S., Hagras, H., Bilgin, A.
Employing an interval type-2 fuzzy logic and hesitation index in a Multi Criteria Group Decision Making system for lighting level selection in an intelligent environment

A Type-2 FML-based meeting scheduling support system

A Type-2 FML-based fuzzy ontology for dietary assessment

Fuzzy markup language for malware behavioral analysis

Applying FML-based fuzzy ontology to university assessment

Torrejon, A., Callaghan, V., Hagras, H.
Selectable directional audio for multiple telepresence in immersive intelligent environments

Mohamed, A., Hagras, H., Shakya, S., Owusu, G.
A fuzzy-genetic tactical resource planner for workforce allocation

A fuzzy logic-based system for indoor localization using WiFi in ambient intelligent environments
Bernardo, D., Hagras, H., Tsang, E.
A genetic type-2 fuzzy logic based system for the generation of summarised linguistic predictive models for financial applications

Wagner, C., Hagras, H.
ZSlices based general type-2 fuzzy sets and systems

Mendel, J.M., Hagras, H., John, R.I.
Guest editorial for the special issue on type-2 fuzzy sets and systems

Multiobjective optimization and comparison of nonsingleton type-1 and singleton interval type-2 fuzzy logic systems

Bilgin, A., Hagras, H., Malibari, A., Alhaddad, M.J., Alghazzawi, D.
Towards a linear general type-2 fuzzy logic based approach for computing with words

Bernardo, D., Hagras, H., Tsang, E.
An interval type-2 Fuzzy Logic based system for model generation and summarization of arbitrage opportunities in stock markets
(2012) 2012 12th UK Workshop on Computational Intelligence, UKCI 2012, art. no. 6335765, .

Bilgin, A., Hagras, H., Malibari, A., Alhaddad, M.J., Alghazzawi, D.
A general type-2 fuzzy logic approach for adaptive modeling of perceptions for computing with words
(2012) 2012 12th UK Workshop on Computational Intelligence, UKCI 2012, art. no. 6335769, .

Huang, H.-D., Lee, C.-S., Hagras, H., Kao, H.-Y.
TWMAN+: A type-2 fuzzy ontology model for malware behavior analysis
Naim, S., Hagras, H.
A hybrid approach for multi-criteria group decision making based on interval type-2 fuzzy logic and intuitionistic fuzzy evaluation

Naim, S., Hagras, H., Garibaldi, J.M.
A fuzzy logic based Multi-criteria Group Decision Making system for the assesement of umbilical cord acid-base balance

Kassem, S., Hagras, H., Owusu, G., Shakya, S.
A type2 fuzzy logic system for workforce management in the telecommunications domain

Bilgin, A., Hagras, H., Malibari, A., Alhaddad, M.J., Alghazzawi, D.
Towards a general type-2 fuzzy logic approach for Computing with Words using linear adjectives

Dynamic Profile-Selection for zSlices based type-2 fuzzy agents controlling multi-user Ambient Intelligent Environments

Sahab, N., Hagras, H.
Towards comparing adaptive type-2 input based non-singleton type-2 FLS and non-singleton FLSs employing Gaussian inputs

An adaptive learning fuzzy logic system for indoor localisation using Wi-Fi in Ambient Intelligent Environments

Ros, M., Delgado, M., Vila, A., Hagras, H., Bilgin, A.
A fuzzy logic approach for learning daily human activities in an Ambient Intelligent Environment

**A novel genetic fuzzy markup language and its application to healthy diet assessment**


**Genetic fuzzy markup language for game of NoGo**

Wagner, C., Goumopoulos, C., Hagras, H.

**Emerging and adaptive fuzzy logic based behaviours in activity sphere centred ambient ecologies**

Hagras, H., Wagner, C.

**Towards the wide spread use of type-2 fuzzy logic systems in real world applications**

Bernardo, D., Hagras, H., Tsang, E.

**An interval type-2 fuzzy logic system for the modeling and prediction of financial applications**
(2012) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 7326 LNAI, pp. 95-105.

Mohamed, A., Hagras, H., Shakya, S., Owusu, G.

**Tactical resource planner for workforce allocation in telecommunications**
(2012) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 7326 LNAI, pp. 87-94.

Yao, B., Hagras, H., Ghazzawi, D.A., Alhaddad, M.J.

**An interval type-2 fuzzy logic system for human silhouette extraction in dynamic environments**
(2012) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 7326 LNAI, pp. 126-134.

Ibrahim, M., Khairy, A., Hagras, H., Abdel-Rahim, N., Shafei, A.E., Shaltout, A.

**Intelligent energy management strategy for decentralized battery storage in grid connected wind energy conversion systems**
Lee, C.-S., Wang, M.-H., Chen, Y.-J., Hagras, H.

**Fuzzy Markup Language for game of NoGo**

Dooley, J., Henson, M., Callaghan, V., Hagras, H., Al-Ghazzawi, D., Malibari, A., Al-Haddad, M., Al-Ghamdi, A.A.-M.

**A formal model for space based ubiquitous computing**

Helal, S., Lee, J.W., Hossain, S., Kim, E., Hagras, H., Cook, D.

**Persim - Simulator for human activities in pervasive spaces**

Hagras, H.

**Towards online adaptive ambient intelligent environments for multiple occupants**
(2011) Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics), 6943 LNAI, p. 3.

Wagner, C., Hagras, H.

**Interpreting fuzzy set operations and Multi Level Agreement in a Computing with Words context**

Sahab, N., Hagras, H.

**Adaptive non-singleton type-2 fuzzy logic systems: A way forward for handling numerical uncertainties in real world applications**

Sahab, N., Hagras, H.

**An adaptive type-2 input based nonsingleton type-2 Fuzzy Logic System for real world applications**

Almehdar, M., Hagras, H.

**An adaptive type-2 fuzzy based charging technique for market design agents in uncertain environments**
Cara, A.B., Rojas, I., Pomares, H., Wagner, C., Hagras, H.

**On comparing non-singleton type-1 and singleton type-2 fuzzy controllers for a nonlinear servo system**

Sahab, N., Hagras, H.

**A type-2 nonsingleton type-2 fuzzy logic system to handle linguistic and numerical uncertainties in real world environments**

Wagner, C., Hagras, H.

**Employing zSlices based general type-2 fuzzy sets to model multi level agreement**

Dooley, J., Wagner, C., Hagras, H., Pruvost, G.

**FollowMe: The persistent GUI**

Sahab, N., Hagras, H.

**A hybrid approach to modeling input variables in non-singleton type-2 fuzzy logic systems**
(2010) 2010 UK Workshop on Computational Intelligence, UKCI 2010, art. no. 5625602, .

Wagner, C., Hagras, H.

**A collection operator for type-2 fuzzy logic systems**
(2010) 2010 UK Workshop on Computational Intelligence, UKCI 2010, art. no. 5625601, .

Wagner, C., Hagras, H.

**Uncertainty and type-2 fuzzy sets and systems**
(2010) 2010 UK Workshop on Computational Intelligence, UKCI 2010, art. no. 5625603, .

Hagras, H., Hong, T.-P.

**Programme chairs - Welcome message**
Dooley, J., Callaghan, V., Hagras, H., Bull, P.  
Simpleware device surrogates: Enabling high-level description & interaction with resource constrained devices  

Ramadan, R.A., Hagras, H., Nawito, M., El Faham, A., Eldesouky, B.  
The intelligent classroom: Towards an educational ambient intelligence testbed  

Dooley, J., Davies, M., Ball, M., Callaghan, V., Hagras, H., Colley, M., Gardner, M.  
Decloaking big brother: Demonstrating intelligent environments  

Lee, C.-S., Wang, M.-H., Acampora, G., Hsu, C.-Y., Hagras, H.  
Diet assessment based on type-2 fuzzy ontology and fuzzy markupl language  

Zaher, M., Hagras, H.  
Data generated type-2 fuzzy logic model for control of wind turbines  

Elfaham, A., Hagras, H., Helal, S., Hossain, S., Lee, J.W., Cook, D.  
A fuzzy based verification agent for the Persim human activity simulator in Ambient Intelligent Environments  
(2010) 2010 IEEE World Congress on Computational Intelligence, WCCI 2010, art. no. 5584151, .

Ibrahim, M., Khairy, A., Hagras, H., Zaher, M.  
Using a fuzzy agent in modeling lead-acid battery operating in grid connected wind energy conversion systems  
(2010) 2010 IEEE World Congress on Computational Intelligence, WCCI 2010, art. no. 5584809, .

Zaher, M., Hagras, H., Khairy, A., Ibrahim, M.  
A type-2 fuzzy logic based model for renewable wind energy generation  
(2010) 2010 IEEE World Congress on Computational Intelligence, WCCI 2010, art. no. 5584091, .
Wagner, C., Hagras, H.
An approach for the generation and adaptation of zSlices based general type-2 fuzzy sets from interval type-2 fuzzy sets to model agreement with application to Intelligent Environments
(2010) 2010 IEEE World Congress on Computational Intelligence, WCCI 2010, art. no. 5584244, .

Hagras, H., Ramadan, R., Nawito, M., Gabr, H., Zaher, M., Fahmy, H.
A fuzzy based hierarchical coordination and control system for a robotic agent team in the robot Hockey competition
(2010) 2010 IEEE World Congress on Computational Intelligence, WCCI 2010, art. no. 5584496, .

Almehdar, M., Hagras, H.
An intelligent fuzzy based system for market design agents
(2010) 2010 IEEE World Congress on Computational Intelligence, WCCI 2010, art. no. 5584680, .

Wagner, C., Hagras, H.
Fuzzy Composite Concepts based on human reasoning

Wagner, C., Hagras, H.
Toward general type-2 fuzzy logic systems based on zSlices

Callaghan, V., Hagras, H.
Journal of Ambient Intelligence and Smart Environments: Preface

Duman, H., Hagras, H., Callaghan, V.
A multi-society-based intelligent association discovery and selection for ambient intelligence environments

Lee, C.-S., Wang, M.-H., Hagras, H.
A type-2 fuzzy ontology and its application to personal diabetic-diet recommendation

What computing with words means to me: Discussion forum
Rivera-Illingworth, F., Callaghan, V., Hagras, H.  
Detection of normal and novel behaviours in ubiquitous domestic environments  

Dooley, J., Callaghan, V., Hagras, H., Bull, P.  
Discovering the home: Advanced concepts  

Doctor, F., Hagras, H., Roberts, D., Callaghan, V.  
A neuro-fuzzy based agent for group decision support in applicant ranking within human resources systems  

Wagner, C., Hagras, H.  
ZSlices based general type-2 FEC for the control of autonomous mobile robots in real world environments  

Lee, C.-S., Wang, M.-H., Hsu, C.-Y., Hagras, H.  
A novel type-2 fuzzy ontology and its application to diet assessment  

Kameas, A.D., Goumopoulos, C., Hagras, H., Callaghan, V., Heinroth, T., Weber, M.  
An architecture that supports task-centered adaptation in intelligent environments  

A pervasive system architecture that supports adaptation using agents and ontologies  

Multidimensional pervasive adaptation into ambient intelligent environments  
Tawil, E., Hagras, H.  
*An Adaptive Genetic-Based Incremental Architecture for the On-Line Coordination of Embedded Agents*  

Minker, W., Weber, M., Hagras, H., Callagan, V., Kameas, A.D.  
*Advanced intelligent environments*  

Wagner, C., Hagras, H.  
*Novel methods for the design of general type-2 fuzzy sets based on device characteristics and linguistic labels surveys*  

Hagras, H., Ramadan, R., Wanas, N., Nawito, M., Mohamed, N., Aly, S., Moustafa, M.  
*Egypt chapter report*  

Jammeh, E.A., Fleury, M., Wagner, C., Hagras, H., Ghanbari, M.  
*Interval type-2 fuzzy logic congestion control for video streaming across IP networks*  

Cook, D.J., Hagras, H., Callaghan, V., Helal, A.  
*Making our environments intelligent*  

Heinroth, T., Kameas, A., Hagras, H., Bellik, Y.  
*Semi-tacit adaptation of intelligent environments*  

Doctor, F., Hagras, H., Roberts, D., Victor, C.  
*A fuzzy based agent for group decision support of applicants ranking within recruitment systems*  

Hagras, H.  
*Welcome message*  
Hagras, H., Callaghan, V., Cook, D., Helal, A.
*The fourth international conference on intelligent environments (IE 08): a report*

Goumopoulos, C., Kameas, A., Hagras, H., Callaghan, V., Gardner, M., Minker, W., Weber, M., Bellik, Y., Meliones, A.
*Atraco: Adaptive and trusted ambient ecologies*

Jammeh, E., Fleury, M., Wagner, C., Hagras, H., Ghanbari, M.
*Interval type-2 fuzzy logic congestion control of video streaming*

Hagras, H., Packham, I., Vanderstockt, Y., McNulty, N., Vadher, A., Doctor, F.
*An intelligent agent based approach for energy management in commercial buildings*

Wagner, C., Hagras, H.
*ZSlices - Towards bridging the gap between interval and general type-2 fuzzy logic*