

FML for Real-World Applications

1. Diet/ Healthcare/ Travel

- (1) Adaptive personalized diet linguistic recommendation mechanism based on type-2 fuzzy sets and genetic **fuzzy markup language**, IEEE Trans. on Fuzzy Systems, vol. 23, no. 5, pp. 1777-1802, 2015.
- (2) Healthy diet assessment mechanism based on **fuzzy markup language** for Japanese food, Soft Computing, vol. 20, no 1, pp 359-376, 2016.
- (3) A novel genetic **fuzzy markup language** and its application to healthy diet assessment, International Journal of Uncertainty, Fuzziness, and Knowledge-Based Systems, vol. 20, no. 2, pp. 247-278, 2012.
- (4) Evaluating cardiac health through semantic soft computing techniques, Soft Computing, vol.16, no. 7, pp. 1165-1181, 2012.
- (5) Diet assessment based on type-2 fuzzy ontology and **fuzzy markup language**, International Journal of Intelligent System, vol. 25, no. 12, pp. 1187-1216, 2010.
- (6) Ontology-based multi-agents for intelligent healthcare applications, Journal of Ambient Intelligence and Humanized Computing, vol. 1, no. 2, pp. 111-131, 2010.

2. E-Learning/ Education/ IRT/ Ontology Construction

- (1) Performance Verification Mechanism for Adaptive Assessment e-Platform and e-Navigation Application, International Journal of e-Navigation and Maritime Economy, vol. 2, pp. 47-62, 2015.
- (2) T2FS-based adaptive linguistic assessment system for semantic analysis and human performance evaluation on game of Go, IEEE Trans. on Fuzzy Systems, vol. 23, no. 2, pp. 400-420, 2015.

3. Social Media/FB/Google Plus

- (1) Intelligent investigation agent based on **FML** and machine learning for social media application, 2016 IEEE World Congress on Computational Intelligence, Vancouver, Canada, 24-29, 2016. (Submitted)

4. Game/ Go

- (1) T2FS-based adaptive linguistic assessment system for semantic analysis and human performance evaluation on game of Go, IEEE Trans. on Fuzzy Systems, vol. 23, no. 2, pp. 400-420, 2015.
- (2) Soft-Computing-based emotional expression mechanism for game of Computer Go, Soft Computing, vol. 17, no. 7, pp. 1263-1282, 2013.
- (3) Genetic **fuzzy markup language** for game of NoGo, Knowledge-Based Systems, vol. 34, pp. 64-80, 2012.
- (4) An ontology-based fuzzy inference system for computer Go applications, International Journal of Fuzzy Systems, vol. 12, no. 2, pp. 103-115, 2010.

5. Energy Management

- (1) An optimization model for **FML**-based decision support system on energy management, in Proceeding of 2014 IEEE International Conference on Fuzzy Systems, Beijing, China, 6-11, 2014,

pp. 850-856.

- (2) **FML**-based decision support system for solar energy supply and demand analysis, 2013 IEEE International Conference on Fuzzy Systems, Hyderabad, India, 7-10, 2013.

6. Patent Evaluation

- (1) **Fuzzy markup language** with genetic learning mechanism for invention patent quality evaluation, in Proceeding of 2015 IEEE Congress on Evolutionary Computation, Sendai, Japan, 25-28, 2015, pp. 251-258.

7. Information Security

- (1) IT2FS-based ontology with soft-computing mechanism for malware behavior analysis, Soft Computing, vol. 18, no. 2, pp. 267-284, 2014.

8. University Assessment

- (1) Apply fuzzy ontology and **FML** to knowledge extraction for university governance and management, Journal of Ambient Intelligence and Humanized Computing, vol. 4, no. 4, pp. 493-513, 2013.