

BAB 5

PENUTUP

5.1 Kesimpulan

Kesimpulan yang dapat diperoleh pada pengembangan sistem pakar fuzzy untuk permasalahan pariwisata adalah sebagai berikut :

1. Faktor-faktor yang menjadi masukan dalam sistem pakar untuk mengambil keputusan adalah budget perjalanan, jarak perjalanan, lama wisata, serta bintang hotel yang menjadi tempat menginap
2. Pengambilan keputusan sistem pakar dengan menggunakan metode fuzzy melewati tahap-tahap yang telah ditetapkan. Pertama proses fuzzifikasi untuk menghitung nilai fuzzy terhadap masukan dan data basis data. Proses selanjutnya adalah perbandingan dalam aturan yang ada. Selanjutnya adalah pengambilan kesimpulan dengan cara membandingkan hasil dari masukan dengan hasil dari basis data. Tujuan wisata yang menjadi hasil keluaran adalah yang mempunyai nilai μ yang mendekati dengan nilai μ hasil perhitungan dari masukan.
3. Sistem pakar ini berhasil dikembangkan dan dapat membantu orang memperoleh informasi mengenai tujuan wisata sesuai dengan kebutuhan yang diinginkan. Informasi yang diberikan adalah informasi jadwal perjalanan serta informasi detail mengenai objek wisata atau hotel.

5.2 Saran

Saran yang diberikan untuk pengembangan sistem pakar ini lebih lanjut adalah :

1. Menambahkan variabel baru untuk menjadi masukan dalam penentu keputusan seperti tipe objek wisata.
2. Memperluas lingkup masalah menjadi negara-negara di benua Asia tidak hanya negara-negara yang berada di Asia Tenggara.
3. Menambahkan detail-detail informasi objek wisata maupun hotel yang ada dalam sistem ini. Misalnya menambahkan peta dari objek wisata atau hotel tersebut.
4. Mengembangkan sistem dengan penambahan fasilitas konversi mata uang sehingga memudahkan admin dalam proses mengubah data harga hotel maupun objek wisata.
5. Menambahkan fasilitas pemilihan tanggal untuk pembelian tiket pesawat dan pemesanan hotel sehingga harga tiket dan hotel tersebut dapat sesuai dengan tanggal yang dipilih.

DAFTAR PUSTAKA

- Abietar, Jose M., *et al.*, 2007, "Designing A Software Tool for Fuzzy Logic Programming", *Computation in Modern Science and Engineering, Proceedings of The International Conference on Computational Methods in Science and Engineering*, Vol. 2, pp. 1117-1120.
- Akinuwesi, B.A., Uzoka, F.M.E., 2009, "A Framework of Web Based Fuzzy Expert System for Managing Tourism Information", *Georgian Electronic Scientific Journal : Computer Science and Telecommunications*, Vol. 20, No. 3, pp. 77-89.
- Alasgarova, Aygun, Muradkhanli, Leyla, 2008, "Expert System for Decision-Making Problem in Economics", *International Journal Information Technologies and Knowledge*, Vol. 2, pp. 297-299.
- Alomary, Alauddin, Jamil, Mohammad, 2006, "An Approach to Strengthen Expert System Shell with Knowledge Illustration Established on Peak of The Fuzzy Logic", *The International Arab Journal*, Vol. 3, No. 3, pp. 210-218.
- Anbari, Elham, *et al.*, 2011, "Assessment of The Knowledge Quality Using A Fuzzy Expert System : A Case of Iranian Car Insurance Company", *International Conference for Future Information Technology*, Vol. 13, pp. 174-178.
- Ariyanto, 2011, "Rp 1 Jutaan Keliling Thailand dalam 10 Hari", Benteng Pustaka, Yogyakarta.
- Bachiller, Agusitin Rodriguez, Glasson, John, 2004, "Expert Systems and Geographical Information Systems for Impact Assessment", Taylor and Francis Inc., New York.
- Balch, Robert S., *et al.*, 2007, "Collection, Storage, and Application of Human Knowledge in Expert System Development", *Journal Compilation*, Vol. 24, No. 5, pp. 346-355.
- Chauhan, Ritu, 2010, "An Expert System for Tourist Information Management", *International Journal of Computer Science and Communication*, Vol. 1, No. 2, pp. 181-183.
- Chellappan, C. Elango, Natarajan, Mallika, 2011, "Fuzzy Rule Based Model for The Perishable Collection-Production-Inventory System", *International Journal of Management Science and Engineering Management*, Vol. 6, No. 3, pp. 183-190.
- Dada, Joseph O., *et al.*, 2011, "Web-Based Expert System for Classification of Industrial and Commercial Waste Products", *Journal of Emerging Trends in Computing and Information Sciences*, Vol. 2, No. 6, pp. 257-262.
- Darlington, Keith W., 2011, "Designing for Explanation in Health Care Application of Expert Systems", *SAGE Open*, pp. 1-9.
- Djam, X.Y., Kimbi, Y.H., 2011, "A Decision Support System for Tuberculosis Diagnosis", *The Pacific Journal of Science and Technology*, Vol. 12, No. 2, pp. 410-425.

- Djam, X.Y., Kimbi, Y.H., 2011, "Fuzzy Expert System for The Management of Hypertension", *The Pacific Journal of Science and Technology*, Vol. 12, No. 1, pp.390-402.
- Dubois, Didier, Prade, Henri, 1980, "Fuzzy Sets and Systems : Theory and Applications", Academic Press, Inc.
- Einipour, Amin, 2011, "A Fuzzy-ACO Method for Detect Breast Cancer", *Global Journal of Helath Science*, Vol. 3, No. 2, pp. 195-199.
- Fahrudin, Hairun, 2012, "Backpacking : Vietnam & Cambodia", Elex Media Computindo, Jakarta.
- Faith, Uzoka, Michael E., 2009, "Fuzzy-Expert System for Cost Benefit Analysis of Enterprise Information Systems : A Framework", *International Journal on Computer Science and Engineering*, Vol. 1, No. 3, pp. 254-262.
- Farshchi, Seyyed Mohammad Reza, Yaghoobi, Mahdi, 2011, "A Novel Fuzzy Expert System Using Image Processing for Sale Car Shape with Online Membership Function", *The Journal of Mathematics and Computer Science*, Vol. 2, No. 2, pp. 222-232.
- Farshchi, Seyyed Mohammad Reza, Yaghoobi, Mahdi, 2011, "Fuzzy Logic Expert Systems in Hospital : A Foundation View", *Journal of Applied Sciences*, Vol. 11, No. 12, pp. 2106-2110.
- Hampton, Mark P., 2010, "Enclaves and Ethnic Ties : The Local Impacts of Singaporean Cross-Border Tourism in Malaysia and Indonesia", *Singapore Journal of Tropical Geography*, Vol. 31, pp. 239-253.
- Hasan, Mir Anamul, *et al.*, 2010, "Human Disease Diagnosis Using a Fuzzy Expert System", *Journal of Computing*, Vol. 2, Issue 6, pp. 66-70.
- Henderson, Joan, 2009, "Transport and Tourism Destination Development : An Indonesian Perspective", *Tourism and Hospitality Research*, Vol. 9, No. 3, pp. 199-208.
- <http://myanmartravelinformation.com>, diakses tanggal 9 September 2012
- <http://wikitravel.org>, diakses tanggal 9 September 2012
- <http://www.1stopmanila.com>, diakses tanggal 9 September 2012
- <http://www.flyphilippines.info>, diakses tanggal 9 September 2012
- <http://www.philippinecountry.com>, diakses tanggal 9 September 2012
- <http://www.thepinaysolobackpacker.com/2011/07/31/brunei-bandar-seri-begawan-tourists-attractions/>, diakses tanggal 9 September 2012.
- <http://www.tripadvisor.com>, diakses tanggal 9 September 2012
- <http://www.tripwolf.com>, diakses tanggal 9 September 2012
- Huimin, Fan, Panpan, Yang, 2011, "Research on Application of Web Services in an Expert System", *American Journal of Engineering and Technology Research*, Vol. 11, No. 9, pp. 251-255.
- Isakki, P., Rajagopalan, S.P., 2011, "The Expert System Designed To Improve Customer Satisfication", *Advanced Computing : An International Journal*, Vol. 2, No. 6, pp. 69-84.
- Kadhim, Mohammed Abbas, *et al.*, 2011, "Design and Implementation of Fuzzy Expert System for Backpain Diagnosis", *International Journal of innovative Technology and Creative Engineering*, Vol. 1, No. 9, pp. 16-22.

- Kakoty, Sangeeta, Sarma, Shikhar Kr., 2011, "Expert System Application in E-Learning Environment : Analysis on Current Trends and Future Prospects", *International Journal of Internet Computing*, Vol. 1, Issue 1, pp. 90-93.
- Kalpana, M., Kumar, A.V. Senthil, 2011, "Fuzzy Expert System for Diabetes using Fuzzy Verdict Mechanism", *International Journal Advanced Networking and Applications*, Vol. 3, Issue 2, pp. 1128-1134.
- Kaur, Arshdeep, 2012, "Development of Neuro Fuzzy Controller Algorithm for Air Conditioning System", *International Journal of Engineering Science and Technology*, Vol. 4, No. 4, pp. 1667-1671.
- Khan, Abdur Rashid, *et al.*, 2011, "Application of Expert System with Fuzzy Logic in Teacher's Performance Evaluation", *International Journal of Advanced Computer Science and Applications*, Vol. 2, No. 2, pp. 51-57.
- Klinov, Pavel, *et al.*, 2011, "The Consistency of The Medical Expert System CADIAG-2 : A Probabilistic Approach", *Journal of Information Technology Research*, Vol. 4, No. 1, pp. 1-20.
- Kristono, Andy, 2012, "Wisata Hemat : Hanoi dan sekitarnya", Elex Media Computindo, Jakarta.
- Kumar, Sandeep, Mishra, Ravi Bhushan, 2010, "Web-Based Expert Systems and Services", *The Knowledge Engineering Review*, Vol. 25, No. 2, pp. 167-198.
- Kusumadewi, Sri, Purnomo, Hari, 2004, "Aplikasi Logika Fuzzy Untuk Pendukung Keputusan", Graha Ilmu, Yogyakarta.
- Mahdi, Asaad A., *et al.*, 2011, "The Diagnosis of Chicken Pox and Measles Using Fuzzy Relations", *Journal of Basic and Applied Scientific Research*, Vol. 1, No. 7, pp. 679-686.
- Mahdi, Asaad, *et al.*, 2011, "Comparison of Fuzzy Diagnosis with K-Nearest Neighbour and Naive Bayes Classifiers in Disease Diagnosis", *Broad Research in Artificial Intelligence and Neuroscience*, Vol. 2, Issue 2, pp. 58-66.
- Malagoli, Stefano, Magni, Carlo Aberto, 2007, "The Use of Fuzzy Logic and Expert Systems for Rating and Pricing Firms", *Managerial Finance*, Vol. 33, No. 11, pp. 836-852.
- Marsh, Krista, Fayek, Aminah Robinson, 2010, "SuretyAssist : Fuzzy Expert System to Assist Surety Underwriters in Evaluating Construction Contractors for Bonding", *Journal of Construction Engineering and Management*, pp. 1219-1226.
- McNeill, F.Martin, Thro, Ellen, 1994, "Fuzzy Logic : A Practical Approach", Academic Press Professional, London, UK.
- Medlik, S., 2003, "Dictionary of Travel, Tourism and Hospitality", Butterworth-Heinemann, Great Britain, UK.
- Moli, G. Poyya, 2011, "Community Based Eco Cultural Heritage Tourism for Sustainable Development in The Asian Region : A Conceptual Framework", *International Journal of Social Ecology and Sustainable Development*, Vol. 2, No. 2, pp. 66-80.
- Mukherjee, Himadri, Kar, Samarjit, 2010, "Fuzzy Expert System for Rural Household Survey in West Bengal", *International Conference on Modeling, Optimization, and Computing*, pp. 612-618.

- Nasreen, Reshma, Thang, Nguyen Toan, 2011, "Marketing of Asian Countries as Tourist Destination-Comparative Study of India and Malaysia", *International Journal of Scientific and Engineering Research*, Vol. 2, Issue 4, pp. 1-18.
- Nosratabadi, Hamid Eslami, *et al.*, 2011, "Evaluation of Science and Technology Parks by Using Fuzzy Expert System", *The Journal of Mathematics and Computer Science*, Vol. 2, No. 4, pp. 594-606.
- Ooshaksaraie, Leila, Mardookhpour, Alireza, 2011, "A Rule-Based Expert System for Construction and Demolition Waste Management", *American Journal of Environment Sciences*, Vol. 7, No. 6, pp. 492-498.
- Owaied, H.H., *et al.*, 2011, "A Model for Intelligent Tourism Guide System", *Journal of Applied Sciences*, Vol. 11, pp. 342-347.
- Podofillini, Luca, *et al.*, 2010, "Using Expert Models in Human Reliability Analysis-A Dependence Assessment Method Based on Fuzzy logic", *Risk Analysis*, Vol. 30, No. 8, pp. 1277-1297.
- Sabri, Ily Amalina Ahmad, *et al.*, 2011, "Tourism Advisory System Using Decision Support System (DSS)", *Empowering Science*, pp. 113-119.
- Sarma, Shikhar Kr., *et al.*, 2009, "An Expert System for Diagnosis of Diseases in Rice Plant", *International Journal of Artificial Intelligence*, Vol. 1, Issue. 1, pp. 26-31.
- Shirazi, Hossein M., 2011, "Fuzzy-RDR : A New Approach to Create Expert Systems by Domain Expert", *Australian Journal of Basic and Applied Sciences*, Vol. 5, No. 7, pp. 1297-1312.
- Siler, William, Buckley, James J., 2005, *Fuzzy Expert Systems and Fuzzy Reasoning*, John Wiley & Sons, Inc., Hoboken, New Jersey, Canada.
- Somkuwar, Vandana, *et al.*, 2011, "An Expert System for Aid in Material Selection Process Using Artificial Neural Network ", *International Journal of Advanced Engineering and Application*, pp. 169-171.
- Sulis, Budi, 2011, "Budget Travelling : Kuala Lumpur", *Elex Media Computindo*, Jakarta.
- Sulis, Budi, 2011, "Budget Travelling : Singapore Update", *Elex Media Computindo*, Jakarta.
- Yadav, Ramjeet Singh, Singh, Vijendra Pratap, 2011, "Modeling Academic Performance Evaluation Using Soft Computing Techniques : A Fuzzy Logic Approach", *International Journal on Computer Science and Engineering* , Vol. 3, No. 2, pp. 676-686.
- Zarandi, M.H. Fazel, *et al.*, 2010, "A Fuzzy Rule-Based Expert System for Diagnosing Asthma", *Transaction E: Industrial Engineering*, Vol. 17, No. 2, pp. 129-142.
- Zhang, Zhun, *et al.*, 2011, "Fuzzy Expert System for Construction Vibration Risk Prediction", *Advances in Information Sciences and Services Sciences*, Vol. 3, No. 9, pp. 50-57.