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## Rule Based Modeling of Knowledge Bases (Conference Paper)

Wani, S.<sup>a</sup>, Sembok, T.M.T.<sup>a</sup>, Wahiddin, M.R.<sup>b</sup>

<sup>a</sup>Centre for Research and Innovation, National Defence University of Malaysia, Kuala Lumpur, Malaysia

<sup>b</sup>Kulliyah of Information and Communication Technology, International Islamic University Malaysia, Kuala Lumpur, Malaysia

### Abstract

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It is critical to have a knowledge base model for efficient storage of extracted knowledge. This ensures that the knowledge is stored in a meaningful way to be used for different applications. The efficiency of the knowledge base model depends largely on the rules of construction. Knowledge represented using logico-linguistic techniques and semantic networks lack a consistent rule based knowledge model. The current paper deals with the analysis of text from the knowledge extraction, representation and semantic network phase to formulate rules which would lay foundations of a knowledge model. The developed rules seem to be promising providing a comprehensive coverage of different scenarios. The extensive coverage is an indication that the knowledge model will cater to the entire domain knowledge, thereby laying the foundations of automatic construction of efficient knowledge bases. © 2017 IEEE.

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Topic: Semantics | Computational linguistics | logical forms

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### Indexed keywords

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Engineering uncontrolled terms: Automatic construction Knowledge base modeling Knowledge extraction Knowledge-base construction Linguistic techniques Rule-based knowledge Rule-based models Semantic network

Engineering main heading: Data mining

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Intelligent support of knowledge transformation based on integration of case-based and rule-based reasoning  
(2017) *Proceedings of the 8th International Conference on E-Education, EBusiness, E-Management and E-Learning*  
presented at the, Kuala Lumpur, Malaysia
- 2 Sanchez, D.M., Esteban, F.J.F., Vicente, I.M.B.  
The audiovisual and digital media as transmitting vehicle between academic world and work world in higher education  
(2015) *Proceedings of the 3rd International Conference on Technological Ecosystems for Enhancing Multiculturality*  
presented at the, Porto, Portugal
- 3 Agarwal, N., Galan, M., Liu, H., Subramanya, S.  
**WisColl: Collective wisdom based blog clustering**  
  
(2010) *Information Sciences*, 180 (1), pp. 39-61. Cited 37 times.  
doi: 10.1016/j.ins.2009.07.010  
  
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- 4 Landset, S., Khoshgoftaar, T.M., Richter, A.N., Hasanin, T.  
**A survey of open source tools for machine learning with big data in the Hadoop ecosystem** ([Open Access](#))  
  
(2015) *Journal of Big Data*, 2 (1), art. no. 24. Cited 132 times.  
<http://journalofbigdata.springeropen.com/>  
doi: 10.1186/s40537-015-0032-1  
  
[View at Publisher](#)
- 5 Kim, J., Storey, V.C.  
**Construction of domain ontologies: Sourcing the World Wide Web**  
  
(2011) *International Journal of Intelligent Information Technologies*, 7 (2), pp. 1-24. Cited 12 times.  
doi: 10.4018/jiit.2011040101  
  
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- 6 Hendler, J., Berners-Lee, T.  
**From the Semantic Web to social machines: A research challenge for AI on the World Wide Web** ([Open Access](#))  
  
(2010) *Artificial Intelligence*, 174 (2), pp. 156-161. Cited 113 times.  
doi: 10.1016/j.artint.2009.11.010  
  
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