Abstract

Numbers do not make much sense while doing analysis. Unless they are supported with narratives, remarks, Interpretations, deductions and explanations of these numbers and figures. This is skilled task that can be accomplished by experts. In this research work, the authors have built an automatic data analysis narrator of web/mobile traffic data. The method employed is Delphi to identify requirements of customers for data analysis report’s ordering and using descriptive statistical analytical methods to build narration of web/mobile traffic. The reports are validated against the ground truth. The results show high level of acceptability of reports by users due to high recall and precision values.

References

https://www.narrativescience.com/quill-engage
http://www.adobe.com/in/marketing-cloud/web-analytics.html
4. Charlie Hargood, David E Millard, and Mark J Weal, "Investigating a thematic approach to
narrative," in In DAH 09 at Hypertext 09, 20th ACM conference on Hyperetext and Hypermedia,
Torino, Italy, 2009.
5. R. Michael Young, "Story and discourse: A bipartite model of narrative generation in
virtual worlds," in Interaction Studies: Social Behaviour and Communication in Biological and
Intelligence, vol. 139, no. 2, pp. 213-252, August 2002.
7. Pablo Gervás and Carlos León, "The Need for Multi-Aspectual Representation of
Narratives in Modelling their Creative Process," in In Proceedings of International Workshop on
Computational Models of Narrative, Quebec City, Canada, 2014, pp. 1-16.
8. Takashi Ogata, Satoki Umehara, Sayaka Yamakage, Koji Ueda, and Yoshinori Hosaka,
"Aspects of Narrative Discourse Process and Their Integration by Computer Simulation."
University of Yamanashi, Japan, Takeda Kofu, Japan, technical report 2004.
9. Craig A. Lindley, "Story and Narrative Structures in Computer Games", Brunhild Bushoff,
10. Albert Gatt and Francois Portet, "Text content and task performance in the evaluation of
a Natural Language Generation system," in In Proceedings of the International Conference on
Recent Advances in Natural Language Processing, Borovets, Bulgaria, 2009, pp. 107-112.
[Online]. https://www.google.co.in/analytics
https://developers.google.com/analytics
[Online]. http://paramjot.in/frontpages/questions
[Online]. http://paramjot.in/frontpages/scales
16. Chia-Chien Hsu and Brian A. Sandford, "The Delphi Technique: Making Sense Of
https://en.wikipedia.org/wiki/Fleiss%27_kappa
University of Leeds, UK, Msc. information systems 2004.
[Online]. http://paramjot.in/frontpages/precedence
20. Paramjot Kaur Sarao, Puneet Mittal, and Gursharan Singh Dhanjal. (2016) Priority of
relevant questions. [Online]. http://paramjot.in/frontpages/relevantquestionsprecedence
questions. [Online]. http://paramjot.in/frontpages/finalquestions
Delphi based Auto Narrator for Web and Mobile Traffic Analysis


Index Terms

Computer Science

Information Sciences

Keywords

Automatic Narration Generation; Delphi technique; Mobile analytics; Natural Language Generation; Quality Function Deployment; Web analytics.