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Automatic Generation of Flood Reports for Twitter

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Abstract: This paper discusses the implementation of an automatic report generation of flood reports from computer data from Philippine Flood Hazard Maps (nababaha.com). Data are in the form of crowd-sourced visual map reports of flooding in nababaha.com. These are gathered and automatically converted into sentences that are then broadcasted through Twitter. Template-based approach of Natural Language Generation (NLG) is used to transform the computer data into understandable texts and sentences. The generated texts are evaluated according to its effectiveness and understandability through a survey to measure fluency, accuracy of conveying desired meaning to the respondent, and how well the readers will respond to the generated text (task-based evaluation). From a scale of 1-5, results from 35 respondents show an average rating of 3.85 for accuracy, 3.875 for task-based evaluation, and 4.045 for fluency.

Key Words: Natural Language Generation