Automated News Generation for TV Program Ratings

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Introduction

Computational Journalism

" the combination of algorithms, data, and knowledge from the social sciences to supplement the accountability function of journalism "

Automated Journalism

"the process of using software or algorithms to automatically generate news stories "

- New phenomenon in the area of computational journalism
- Specifically referred to the field using algorithms to automatically generate news stories
- To produce articles automatically, high-quality data (input) and reliable algorithms (throughput) are the requirements to create articles in **narrative form** (output)

Research Purpose

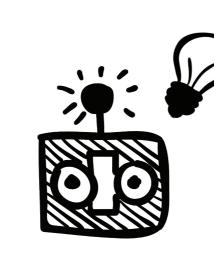
 Aims to propose the framework of automated journalism in TV industry especially about TV ratings

System Overview

Framework

Data Gathering RATING TYPE NETWORK RATING NUMBER TV PROGRAM

Event Identification



UPWARD PROGRAM RATINGS RANKING DOWNWARD PROGRAM

BEST PROGRAM

Insight Prioritization

ARRANGE!



- **✓ RATINGS RANKING** ····
- **V** BEST PROGRAM→
- ✓ UPWARD PROGRAM ·
- ✓ DOWNWARD PROGRAM···

Narrative Generation







News Publication

News Article Structure

Template

The whole structure of the news story.

Module

The building block of the template. Each of the modules contains critical issues. Some modules could be ruled out if they are not so significant to the situation.

Sentence

Components of the module that actualizes the main topics in to natural language.

Data

Data is the initial input of overall process.

#TEMPLATE

[] : data

MODULE 1. Broadcast Networks Ratings Ranking

SENTENCE 1.

[broadcast network] won [day of week] primetime ratings race with a [rating number] [rating type], according to [data source].

SENTENCE 2.

[broadcast network] was next up with a [rating number], then [broadcast network] at [rating number] , and [broadcast network] at [rating number].

MODULE 2. The Best Rating Program

Despite the competition, [#1 program by rating] ranks as No. 1 program of [day of week] primetime. It averaged [rating number] [rating type] and [number of viewers].

MODULE 3. Upward Adjustment Program

[upward program] ticked up from its fast national rating [day of week] to finish with [rating number] [rating type]. Also, [upward program] adjusted up [increase value] in [rating type] to a [rating number] .

MODULE 4. Downward Adjustment Program

However, [number of downward program] shows suffered downward revisions to [rating type] from [day of week] fast national numbers. [broadcast network] 's [downward program] slipped [increase value] to a [rating number] .

Conclusion

Implication

Improvements in work efficiency of journalists by generating news faster at a larger scale with great accuracy

Future Work

- Not only limited to news articles, but also expanded to other format of narratives for which structured data are available
- Personalization of the story is possible depending on reader's preferences

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