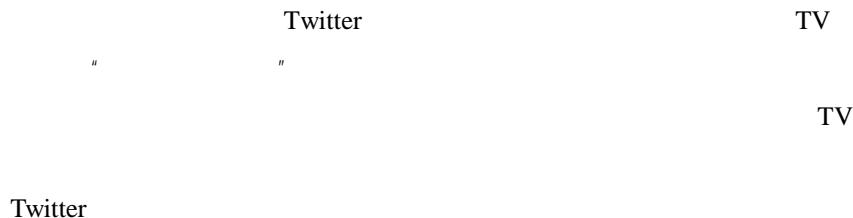


Twitter

† † † † † †
 † 464-8601 1
 ‡ 500-8288 1-38
 E-mail: † {tkobayashi mnoda}@murase.m.is.nagoya-u.ac.jp † {ddeguchi ide murase}@is.nagoya-u.ac.jp
 ‡ ttakahashi@gifu.shotoku.ac.jp



Detection of On-the-spot Comments for Twitter

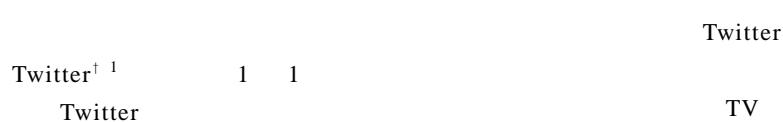
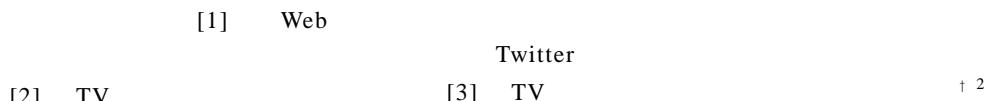
Takashi KOBAYASHI[†], Masafumi NODA[†], Daisuke DEGUCHI[†], Tomokazu TAKAHASHI[‡],
 Ichiro IDE[†] and Hiroshi MURASE[†]

† Graduate School of Information Science, Nagoya University 1 Furocho, Chikusa-ku Nagoya, 464-8601 Japan
 ‡ Faculty of Economics and Information, Gifu Shotoku Gakuen University 1-38 Nakauzura, Gifu, 500-8288 Japan
 E-mail: † {tkobayashi mnoda}@murase.m.is.nagoya-u.ac.jp † {ddeguchi ide murase}@is.nagoya-u.ac.jp
 ‡ ttakahashi@gifu.shotoku.ac.jp

Abstract On the social networking and micro-blogging service “Twitter”, there has been increasing “on-the-spot comments” while watching a sport game at a stadium or watching TV at home. We aim at the detection of these on-the-spot comments among other comments on Twitter. This paper reports an experiment to detect on-the-spot comments for TV programs, analyzing the frequency of occurrence of words by focusing on both program independent and dependent information.

Keyword Twitter On-the-spot comments Text analysis

1. 140



† 1 Twitter^{† 1} 1 1
 Twitter
 † 2 Twitter http://twitter.com/
 http://tvz.in/

2.

"

"

Twitter API^{† 3}

1 TV

| | 1 | 2 | 3 |
|---|------|------|------|
| % | 73.7 | 76.3 | 79.9 |

2

False-positive

| | |
|---|-----|
| 1 | |
| 2 | ... |

1

2

3

1

3 fold cross-validation

3

(1) イベントによらない情報を用いたラベル付け

SVM

3.3.

2

1

2

(2) イベント固有の情報による書き込みの絞り込み

1

1

3

TV

3.1

| | | | | |
|------|----|-----|----|---|
| 2010 | 1 | 3 | TV | 5 |
| 40 | 54 | | 1 | |
| 5 | | 614 | | |

4

Twitter

TV

200 200

3 fold cross-validation

SVM

90.1

3.2. 番組固有の情報による絞り込み精度

| | | | |
|----|---|----|-----|
| TV | 1 | 54 | 815 |
|----|---|----|-----|

[1]

" " 16
6C-i8 Feb. 2005.

[2]

" " 16
4B-i9 Feb. 2005.

[3] S. Asur and B.A. Huberman, “Predicting the future with social media (informal publication),” ArXiv e-prints, 1003.5699, Mar. 2010.

† 3 Twitter API <http://apiwiki.twitter.com/>