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SNS

Flickr 1 YFCC100M

キーワード SNS

Similar Geo-Region Mining based on Visual Concepts in Photos from Social Media

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Abstract It would be useful for travelers if we can recommend destinations based on similar or different points from places well-known to them. To provide such supports, we have been studying a method for detecting similar geo-regions based on visual concepts in photos from social media. In this paper, at first, we report the result of detecting similar geo-regions by applying the proposed method to the YFCC100M dataset which contains about 100 millions photos on Flickr. Secondly, we also report the result of evaluating the effectiveness of the proposed method by comparing similarities between geo-regions calculated by the proposed method and ones obtained by a subject experiment.

Key words Travel, SNS, geo-region similarity

1. はじめに

[8]

WTTC

$$[1]$$

9.8%

GDP

2 8,400

JNTO

2015

[2]

47.1

2,000

1964

1970

45

2020

[3]

SNS

SNS

SNS

SNS

Wi-Fi

ICT

[9]

1

SNS

[4]

SNS

2

Flickr

269,192

ICT

2. SNS

Flickr

[5]

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3.

[6]

4.

2. 類似地域の検出実験

[7]

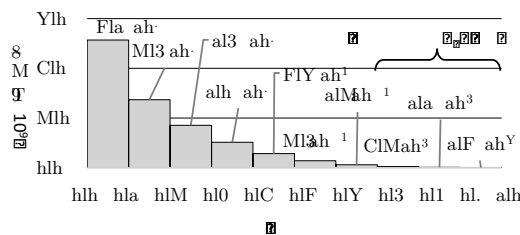
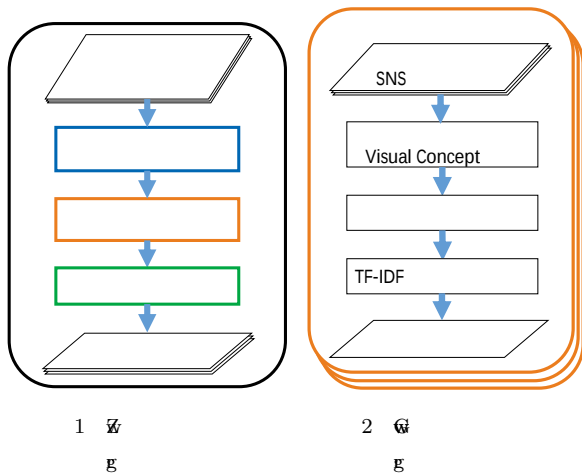


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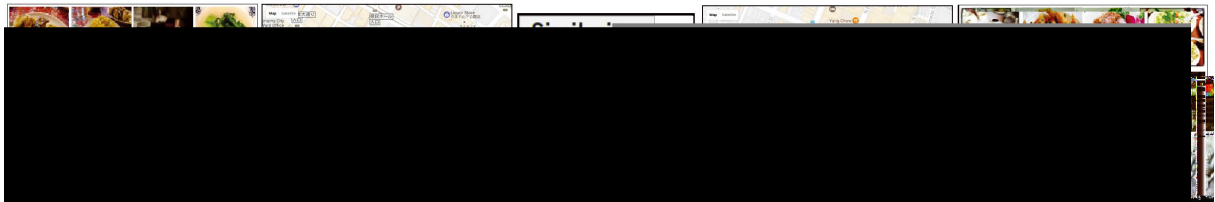
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3. 類似度の妥当性の評価

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4

3 Visual Concept

Visual Concept

5

Thurstone • 比較元地域群 S : 5 箇所

1 [11]

• 比較対象地域群 T : 10 箇所

2

3.1 Thurstone 1

$${}_{10}C_2 = 45$$

3.2

$$5 \times 45 = 225$$

3.3

5

3.4

3.1 Thurstone の 1 対比較法による間隔尺度値の算出

1

2

$$s \in S$$

Thurstone 1

$$t_i \in T$$

$$t_j \in T \quad i \neq j$$

$$s_i \in S$$

2

$$t_j, t_k \in T \quad j \neq k$$

$$s \quad t_i \quad t_j$$

$$s_i \in S$$

$$t \in T$$

225

110

115

2

1,575

Thurstone 1

$$s_i$$

0

1

3

$$t$$

$$s_i$$

1

$$s_i \in S$$

1

4. ま と め

SNS

Flickr

1

YFCC100M

2

Google

3

3

Visual Concept

Places

SNS

Visual Concept

SNS

0.7

謝辞

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● 岐阜

● 伊勢

● 長島

1.00 2 0.51

Flickr

YFCC100M