Entity Resolution and Location Disambiguation in Ancient Hindu Temples Domain using Web Data

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Introduction

Methods

 Challenge of Entity Resolution in the domain where information is scarcely available. Therefore, data is generated by over social multi-media the crowd platforms such as YouTube, Twitter, etc., Hence, data is ridden with subjective evaluations, opinions, and speculations.

• Data snippets contains multiple temple and multiple temple location, names therefore, additional problem of location disambiguation.

• We manually designed and wrote rules for parsing the textual data using JAPE Grammar in GATE tool.

• Extract temple name and temple location the document from di using disambiguation methods.

• Use Google Maps API to list temple names located around the extracted temple location. The temple names and temple A demo of our system is accessible at tinyurl.com/templedemos

 Demo of the Snippet Ranking system can be accessed at tinyurl.com/entityr

Demonstration

References

• Takashi Awamura, Daisuke Kawahara, Eiji Aramaki, Tomohide Shibata, and Sadao Kurohashi. 2015. Loca- tion name disambiguation exploiting spatial proximity and temporal consistency. In Proceedings of the Third International Workshop on Natural Language Processing for Social Media, pages 1–9.

Irrelevant Postings	Relevant Postings
The glittering gold-plated gopuram of the Sanctum	Shree Giririraj Ji Maharaj Daan Ghati Temple is
Sanctorum of the Tirumala Venkateswara Temple is	located in Govardhan Mathura UP and is
called Ananda Nilayam According to Vaishnava	dedicated to Govardhan Lord Krishna. The literal
philosophy gopurams of the sanctum sanctorum are	meaning of 'Govardhana' is 'Gov' which translates
named Tirumala Venkateswara Temple Tirumala	to 'cows', and 'vardhana' which means
Ananda Nilayam Sri Ranganathaswamy Temple	'nourishment'.
On a february 2017 trip to Sri Lnaka we visited 4 World	Ammachiveedu Muhurthi is a Hindu temple
Heritage Site Buddhist Temples. Our guide and tour	located in the Kollam district of the state of Kerala
leader, Janaka Thevin Dissnayake, provided	India It is estimated to be around 600 years old
appropriate introductions and commentary throughout.	and holds
Palani is a town and a municipality in Dindigul district, Tamil Nadu, located about 100 kilometres north-west of Madurai, 100 kilometres South-east of Coimbatore, and 60 kilometres west of Dindigul	Achalpuram Shivalokathyagar Temple is a Hindu temple located at Achalpuram in Nagapattinam district of Tamil Nadu India
Life in different perspectives from Its tranquil pace will	Gola Gokaran Nath Temple is a Hindu temple in
prove jarring for the blockbuster-inclined, but	Gola Gokarannath Uttar Pradesh India and is
Manakamana rewards patient viewers with a singularly	also known as Shiv Temple of Gola Gokaran
haunting experience- Rotten Tomatoes	Nath

•Sample descriptions (posts) from YouTube videos on various temples. Irrelevant posts are snippets which cannot be associated with any temple, whereas the relevant location form a tuple ti stored in set T

• For each element $t \in T$, we calculate TF-IDF score for tuple t over each document $I \in D$, where D is the indexed set of ocuments.

We rank documents based on TF-IDF cores for each query t∈T and map the top anked d to the temple.

Results

Our dataset consists of more than four nundred thousand temple names with their ocations extracted from Google Places. It also contains more than two hundred housand videos fetched from YouTube.

We sample 1000 videos randomly from the complete video set to compute precision, recall and F-measure and evaluate the performance of videos mapped to the temple

Precision = 0.863, Recall = 0.89, F = 0.876

Severyn Alessandro Aliaksei and Moschitti. 2015. Learning to rank short text pairs with convolutional deep neural networks. In Proceedings of the 38th International ACM SIGIR Conference on **Research and Development in Information** Retrieval, pages 373–382. ACM.

Videos & Map

tab

LEMP

(Gujarat)

Giriraj Dham, posts are about Ammachiveedu Muhurthi, Shivalokathyagar and Gorakhnath temples respectively.

Snippet extraction

The Sun Temple at Modhera dates back to early 11th century CE and was built by King Bhimdev I in 1026 CE. The Sun Temple was built by King Bhimdev I in 1026-27 AD, two centuries before the Sun Temple at Konark. It was during the same period that the Jain temples at Mount Abu were constructed by Vimal Shah. The Rudra Mahal temple at Siddhapur also dates back to this period. Also re-constructed at the same time was the Somnath temple at Somnath Patan.



Temples of India Temples of India Entity: Sun Temple Modhera Choose Entity Modhera Sun Temple Search Temple Search Temple By Loca Mapping of Modhera, Gujaral 384212, Ind **Snippet Ranking** dianul Images Visiens May (b)**Temple Search** videos with Scores **Clustered Snippets** Temple (a) Show Scores sun temple modhera Modhera Sun Temple Best Mehsana Gujarat Associated Mentions Alias Description Tapovan Ashram Modhera Mehsana Gujarat Score Godhara Village Amba Dham Mandy Kutch Gujarat Sun Temple at Modhera is one of the few shrines that are dedicated to the Sun God. In 1026, the temple was built by King Bhimdev of the Solanki dynasty (believed to be the descendants of the lineage of Sun God). This ancient temple revives the Sun temple Arwal Bihar reminiscences of Sun Temple at Konark in Orissa. Turning in the pages of history, one can notice the mention of Modhera in 0.360358 the scriptures like Skanda Parana and Brahma Parana. The surrounding area of Modhera used to be known as Dharmaranya List of Entities Mehsana Gujarat (forest of righteousness) and the place was blessed by Lord Rama. Kshetrapal Dada Temple The Sun Temple at Mothera dates back to early 11th century CE and was built by King Bhimdey I in 1026 CE. It was during Mehsana Gujaral the same period that the Jain temples at Mount Abu were constructed by Vimal Shah. The Radra Mahal temple at Siddhapur 0.199711 SUN TEMPLE also dates back to this period. Also re-constructed at the same time was the Somnath temple at Somnath Patan. Belagavi Karnataka Konark Sun Temple SUN-worship in Gujarat is known from remote antiquity as in whole of India. In Gujarat prevalence of the sun-cult is indicated Puri Odisha by the number of inscriptions found. This is further strengthened by the distribution of monumental remains as also the Sun Temple. 0.2[439] iscovery of a number of stone sculptures of the pantheon from various parts of Gujarat dating from about 5th century B.C. to Anand Gujarat late mediaeval period. Sun Temple Giridih Jharkhand Mothera is known for the 11th century Sun temple. The 11th century Sun temple is situated on a knoll in Mothera. The Sun Sun Temple Temple was built by King Bhimdey I in 1026-27 AD, two centuries before the Sun Temple at Konark. This temple is one of the Jhalawar Rajasthan finest Hindu temples in Gujarat, built by the great Solanki dynasty. This temple and the Konark Sun temple in Orissa are very 0.22554 Deo Sun Temple similar. This similarity is that this temple was also designed in such a way so as to let the dawn sun shine on the image of Aurangabad Bihar Surya, at the time of equinoxes. The main hall and shrine are reached through a complex, pillared pavilion. Sun Temple , Dioura Nawada Bihar

Demonstration of the System

Methods

To extract the basic location and video

data related to each temple, we use the Google Maps and YouTube API respectively.

• We disambiguate the name and location of each temple using publicly available data on the Web and leverage Google Maps to assign videos to the correct temple. • Temples names and temple locations are extracted from the snippets using text processing techniques.

• Given a new temple, we retrieve the set of snippets related to the temple. These snippets are fed as input to a CNN based ranking system to score and rank snippets based on the queried temple.