Autonomous machine, obstacle-solution, self-explanation generator

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1 Abstract

We are planning to convert input data about charactrestics of a set of given objects, preferably in json format, to a short story driven from a set of short stories.

keywords

text entailment

Narrative generation

2 Introduction

Importance An individual sees objects with their characteristics through Google glass and receives personalized very short stories driven from a corpora of short stories preferably strongly tied to interests of the subject individual.

3 Methodology

Input Data points

- input 1 JSON Format: {"location":{"title":"alley","quality":{"long","narrow"},"time":"sunset", "old man"}
- input 2: JSON Format: {"location":{name:"bus","time":"night"},"child"}

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Corpra

- The sun was setting at the end of the long, narrow, paved alley. First I saw the dark, small-sized figure of a lady crossing the far-end width of the alley with a baby carrier. Then dark, bent figure of an old man with a crane. Uncertainly, I felt his black figure stopped in the middle and gazed at me for a few seconds before continuing his way. A vague bit of regret formed on a wall of my heart and slided into one of its dark alleys.
- The empty bus stopped in the station for passengers to ride on. One after another, they faced empty seats to chose among. Then they whether chose successive subjects to think or absentees to message on their phones. Late at night, when the driver parked and left the bus, he saw a random child-aged absentee penetrated by a random thought sitting behind the steering wheel, gazing at him while pushing his nose against the glass.

Output

Sample output: The bus turned its head to the narrow long alley. First a lady with a baby rode on. Then, an old man with a crane. Once the bus started to move away, I felt the dark figure of the old man gazing at me.

Mathematic representation Proposing a model which maximizes g $p(W|D)$ which should be decomposed to $\prod_{i=1}^{|W|} p(w_i|D)$ where $w_i \in W$ and $d_i \in D$ An encoder-decoder LSTM must be used because E is a sequence and $|E| \neq |L|$.

ideas

- Text entailment from british professor
- buddlehopy data to text
- event extraction
- LSTM
- GAN
- graph of events from saarland university
- using information extraction techniques such as those in buddupully to find out with corpus excerpts match better the input data.
- Text graphing like that of Dr. Demberg students' story generation
- text labeling
- event extraction between data points using neural networks
- start and ending data and event selection using neural networks
- attentional learning

- beam search
- information extraction extraction of a plan (start,...,end) such as that of Puduppully
- encoder-decoder

Approach

3.1 Corpus

collection strategies

Existing corpus

3.2 Training

Information Extraction from the corpus to build a content plan

4 Results

4.1 Human evaluation

Obstacle,solution recognition

Surface realization

Crowdsourcing

4.2 Machine evaluation

Obstacle,solution recognition

Surface realization

5 In future

Input

Output

6 Todo

References

[1] Learning to Give Route Directions from Human Demonstrations http://www2.informatik.uni-freiburg.de/ kretzsch/pdf/osswald14icra.pdf