Fine-grained Opinion Mining with an End-to-end Neural Model

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Fine-grained opinion mining

Fine-grained opinion mining aims to detect explicit opinion expressions and their sentiment, identify targets (entities or propositions at which the sentiment is directed), holders (entities that express the opinion) and relations among extracted entities.

Multi-task learning with semantic role labeling (SRL)

John likes that she enjoys being at the park.

likes: A0 V A1 A1 A1 A1 A1 A1 A1
enjoys: O O A0 V A1 A1 A1 A1

Future work

▶ finish evaluation of the proposed model :)
▶ resolve noise in MPQA (benchmark dataset)
He said that signing the protocol will have a positive outcome.
▶ sentiment inference
People are relieved that the reform will resolve this problem.

Preliminary results

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<th>SRL</th>
<th>ds ext</th>
<th>all roles ext</th>
<th>sentiment class</th>
<th>joint</th>
<th>f1 @ ds</th>
<th>f1 @ holder</th>
<th>f1 @ target</th>
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