BERT Learns Numbers:
Training Transforms to Capture Quantity in Text

Ayme Tomson
Computing
David Buttler
The U.S. records total cases and another day of at least deaths.

A 10-year-old former Nazi SS concentration camp guard has been found guilty of complicity in the murder of more than 10 prisoners. Bruno Dey was handed a 0-year suspended prison sentence by a court in the German city of Hamburg.
Training Data

<table>
<thead>
<tr>
<th>Input Sentences from News</th>
<th>Hand Annotated Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>only three countries, the U.S., Colombia and Venezuela, had offered assistance.</td>
<td>Number: three</td>
</tr>
<tr>
<td></td>
<td>Unit: countries</td>
</tr>
<tr>
<td>about 60% of USX's sales come from oil and natural gas.</td>
<td>Number: 60</td>
</tr>
</tbody>
</table>
|                         | Unit: %

six men are dead
Natural Language Understanding

The U.S. records four million total cases and another day of at least 1,100 deaths.

A 93-year-old former Nazi SS concentration camp guard has been found guilty of complicity in the murder of more than 5,000 prisoners. Bruno Dey was handed a two-year suspended prison sentence by a court in the German city of Hamburg.

Four-year study of 371 reefs in 58 countries around the world reveals "sharks are functionally extinct on many of the world’s reefs". Sharks were not observed on nearly 20% of surveyed reefs, suggesting a widespread decline that has gone undocumented on this scale until now.

news.ucsb.edu/2020/0...