Neural Relation Extraction with Multi-lingual Attention

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• Extract Relational Facts from plain texts

Bill Gates  Founder  Microsoft

Bill Gates was the co-founder and CEO of Microsoft
Only consider **mono-lingual** data → People speaking **different** languages also **share** similar knowledge.

New York is a city of USA

纽约 (niuyue) 是 (shi) 美国 (meigu) 的 (de) 一座 (yizuo) 城市 (chengshi)
Consistency and Complementarity

• Consistency
  • patterns expressing relations consist among languages

• Complementarity
  • texts in different languages can be complementary to each other
Methodology

- Sentence Encoder
  - CNN
  - PCNN
- Multi-lingual Attention
  - Mono-lingual
  - Cross-lingual
- Relation extractor
• Multi-lingual Attention
Multi-lingual Attention

- Cross-lingual Attention
Experiments

![Graph showing precision and recall for different models. The graph includes lines for CNN-Zh, CNN-En, CNN+joint, CNN+share, and MNRE. The 'Our Model' and 'Joint Model' are highlighted.](image-url)
THANK YOU

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