

Applications of Memory Network

--NLP bimonthly report

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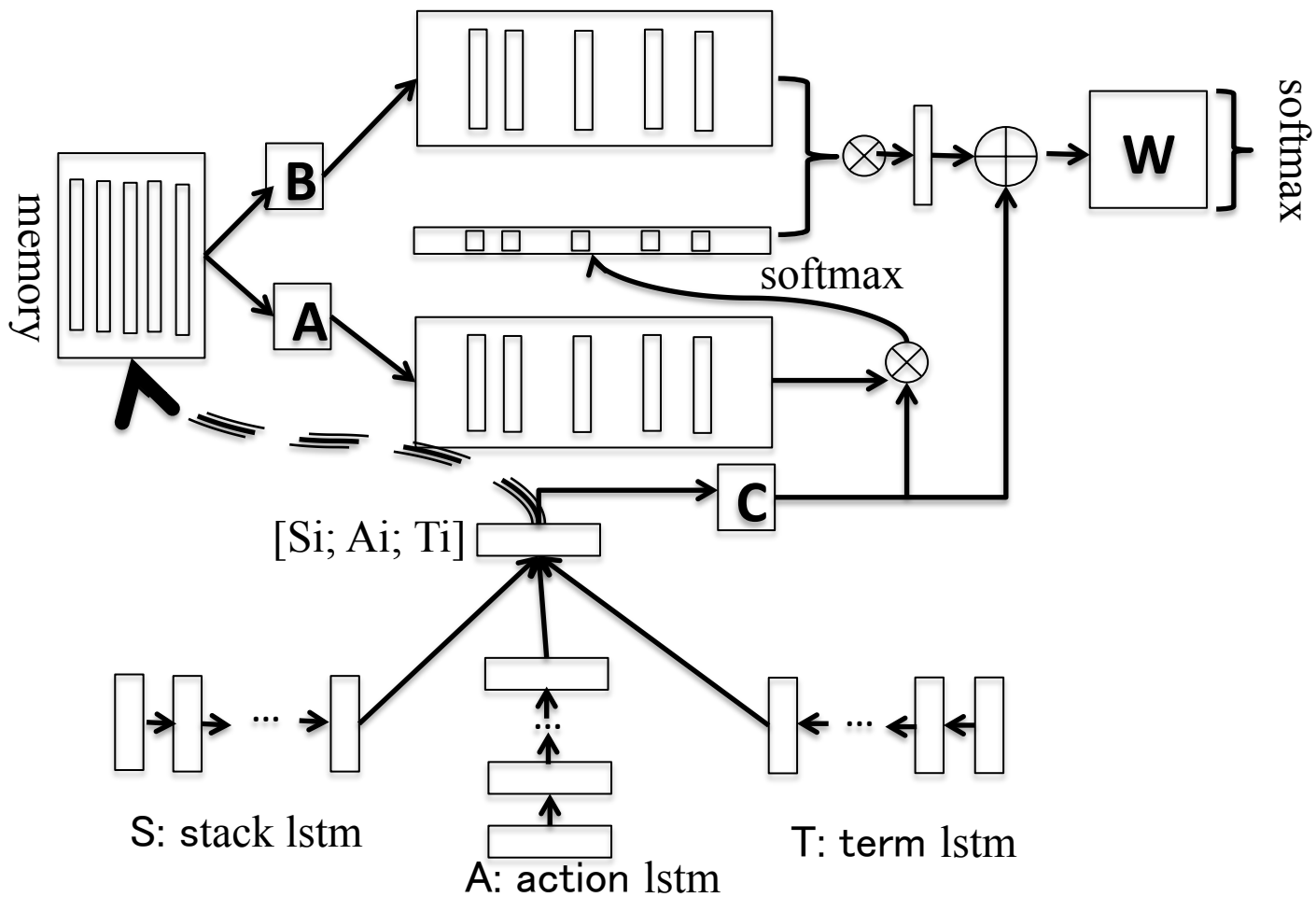
Applications

- Parsing
- Poetry generation
- Sequence-to-sequence generation, e.g. QA, machine translation

Basics Preparation

- Memory network
 - Ran the open-source and get comparative results with the paper.
 - Read the code (Torch)

Parsing

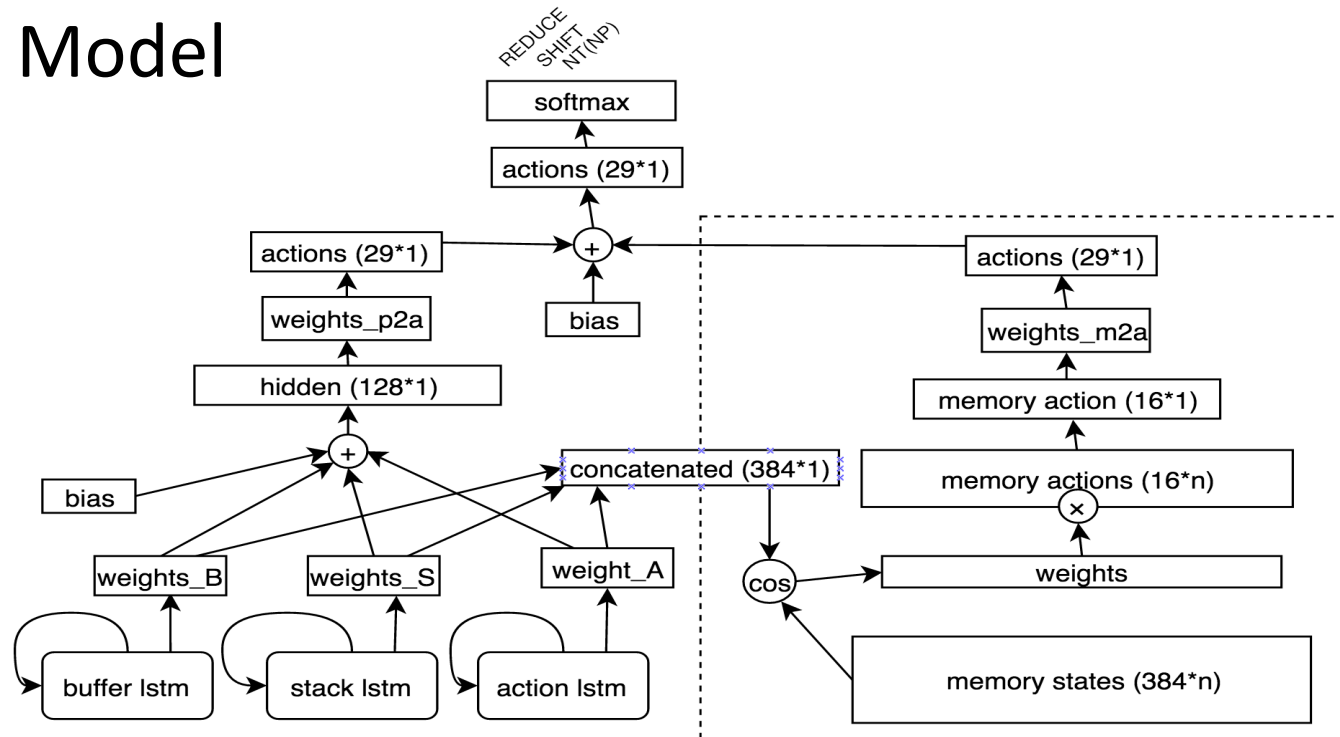


Parsing: Progress

- Basics Preparation
 - Ran the open-source code and get slightly better results than the paper.
 - Read rnng code (C++).

Parsing: Progress

- Initial Model



- Progress

- Doesn't work so far
- Under optimization

Parsing: Progress

- Cascade Model
 - Train lstm
 - Train memory network with lstm fixed
- Progress
 - Under training

Parsing: Progress

- Joint Model
 - Coding [90%]

Poetry Generation

- Fixed bugs of basic model and got competitive result with Qixin's system [\[result\]](#)
- Added memory networks to the basic model and got the initial result. [\[mnresult\]](#)

Sequence-to-sequence

- Basics preparation
 - Ran open-source code and met with some problems (cost keep ascent)
 - Read open-source code (Theano) [under-going]
 - Paraphrase data preparation.

Reading and Document

- Reading group:
 - 6 papers [\[reading group\]](#)
- Document:
 - A report of music generation [\[report\]](#)
 - Rnng user guide and manual [\[user guide\]](#)
 - Cnn platform manual (keep updating) [\[manual\]](#)