

# Document structure model for survey generation using neural network

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# Problems & Ideas

- Problems of informative and coherent of system summary
  - semantic relation among sentences
  - discontinuous context
- Ideas: document structure
  - sentence-paragraph-document
  - continuous context

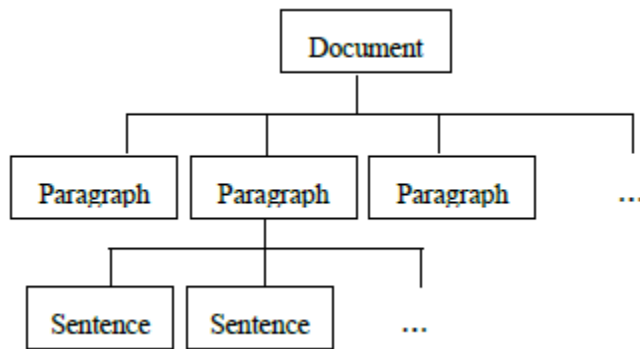


Fig.1 document structure

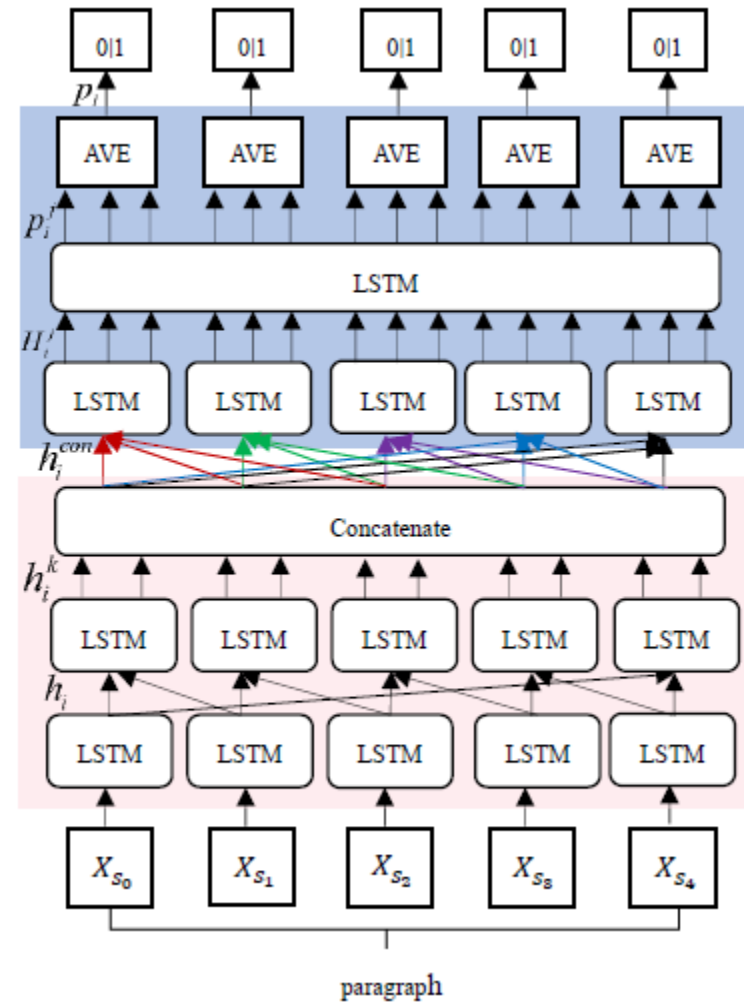


Fig.2 hierarchical context model based on document structure

# Main Contributions

- document structure

Model	ROUGE-1	ROUGE-2	ROUGE-L
LSTM_s	29.81%	5.05%	12.06%
PM	<b>31.42%</b>	3.05%	<b>12.77%</b>

- continuous context

Model	ROUGE-1	ROUGE-2	ROUGE-L
PM	31.42%	3.05%	12.77%
BCM	33.20%	4.27%	13.83%
TCM	32.44%	4.47%	13.71%
BCM +	33.70%	4.64%	14.09%
TCM +	34.04%	4.67%	<b>14.53%</b>
HCM	<b>34.10%</b>	<b>4.78%</b>	14.08%

Model	ROUGE-1	ROUGE-2	ROUGE-L
SummaRuNNer	33.38%	4.57%	13.77%
Concat-Contexts	33.70%	4.69%	14.02%
HCM	<b>34.10%</b>	<b>4.78%</b>	<b>14.08%</b>