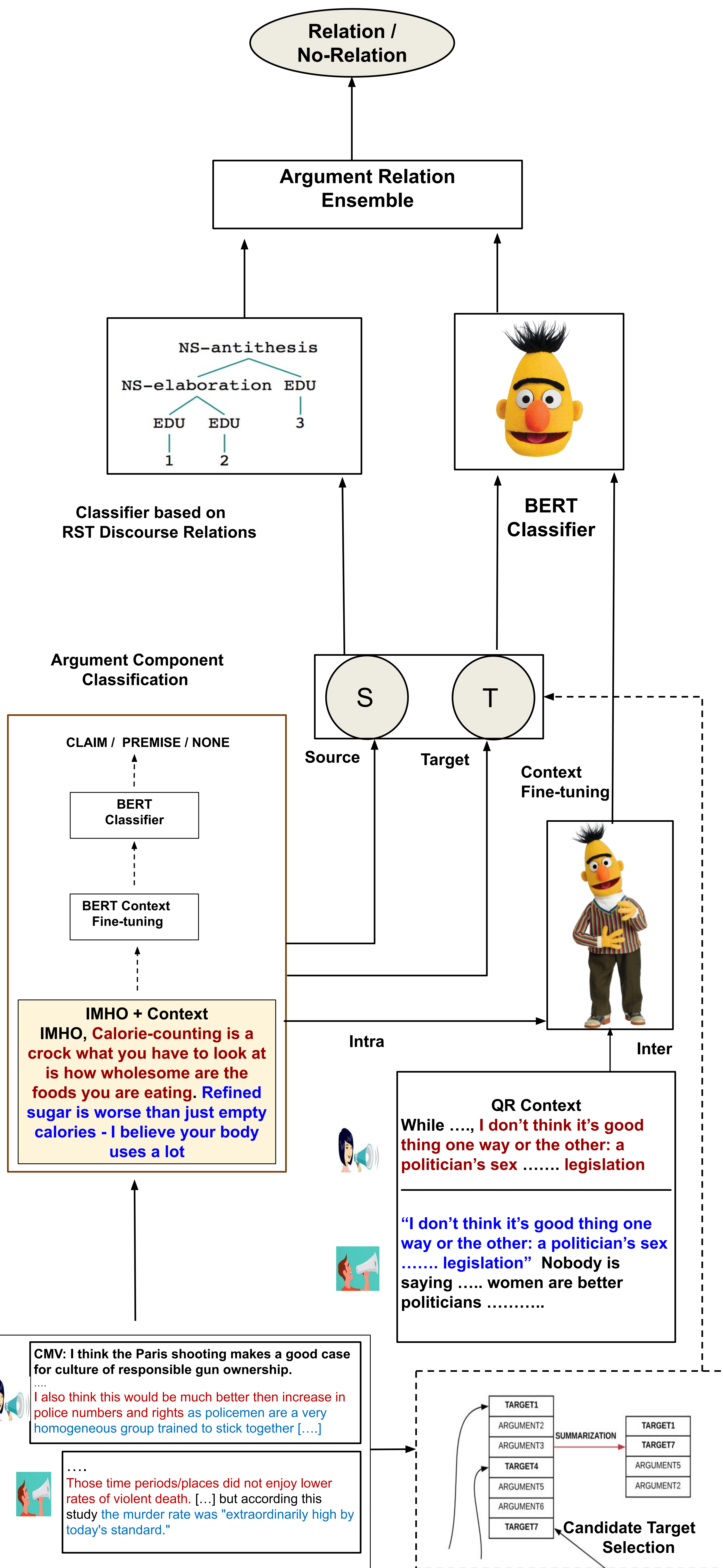
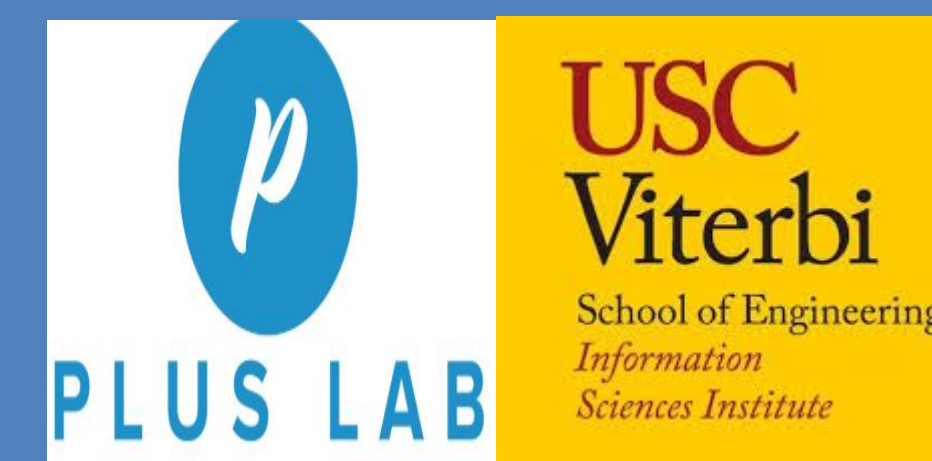




AMPERSAND : Argument Mining for PERSuasive oNline Discussions

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CONTRIBUTIONS

- Annotated argumentative components and relations in threads from the Change My View subreddit for argument mining on dialogues
- Introduced distantly labeled datasets capturing micro and macro level context
- Fine-tuned BERT on these datasets and demonstrated improvement
- Used RST discourse relations to improve relation identification

METHOD	C	P	NONE
BERT	62.0	72.2	71.3
IMHO + Context Fine-tuned BERT	67.1	72.5	75.7

F-Score of Argument Component Classification

METHOD	GOLD	PRED
BERT	20.3	18.5
IMHO + Context Fine-tuned BERT	23.7	21.8
+RST Ensemble	27.2	25.4

F-Score of inter turn Relation Prediction with Gold and Predicted Claims

METHOD	GOLD	PRED
BERT	15.8	14.1
QR Context Fine-tuned BERT	19.1	17.6
+RST Ensemble	21.2	19.1
Candidate Selection	26.8	24.3

F-Score of inter turn Relation Prediction with Gold and Predicted Premises