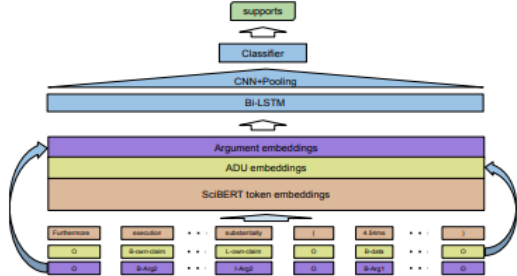


(a) **ADU Recognition.** Tokens are embedded with a frozen PLM, further contextualized with a trained LSTM followed by a CRF to calculate the tag sequence.



(b) **Argumentative RE.** Tokens are embedded with a frozen PLM, ADU tags and argument tags are embedded with simple embedding matrices. Embeddings are concatenated, contextualized with a LSTM and converted into a single vector that gets classified by a single fully connected layer.

Figure 2: Model setup for (a) ADUR (top) and (b) ARE (bottom).

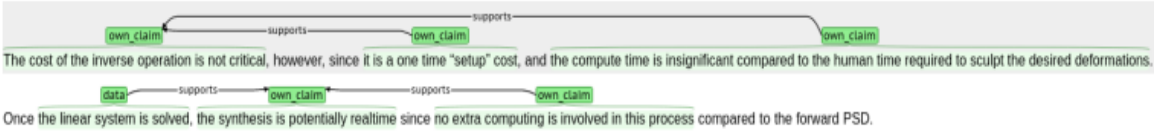
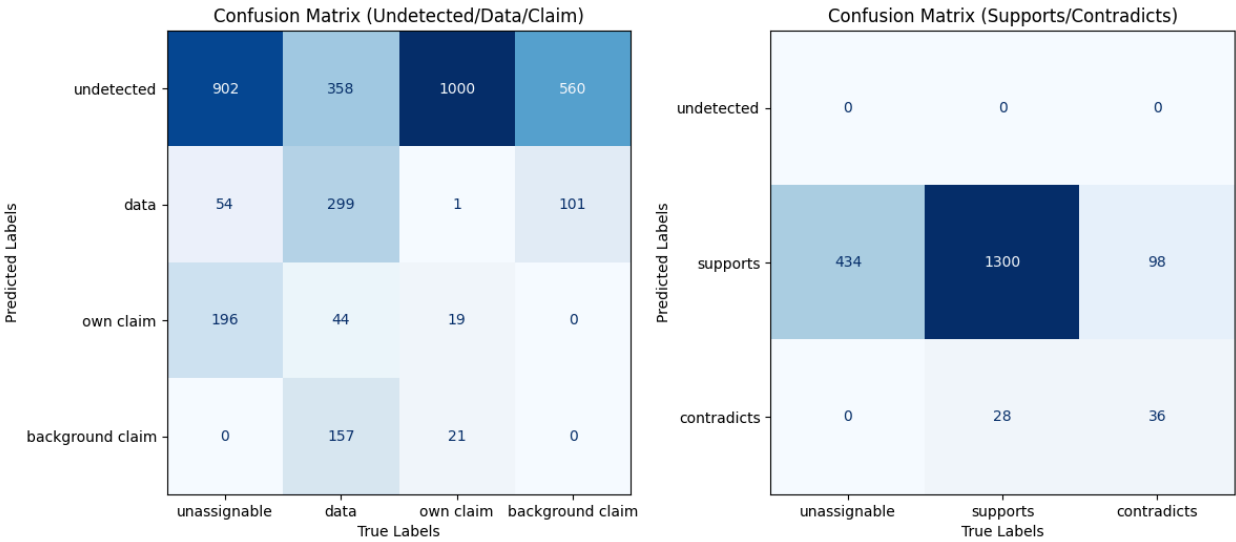


Figure 1: Example with argumentative structure from the Sci-Arg dataset.



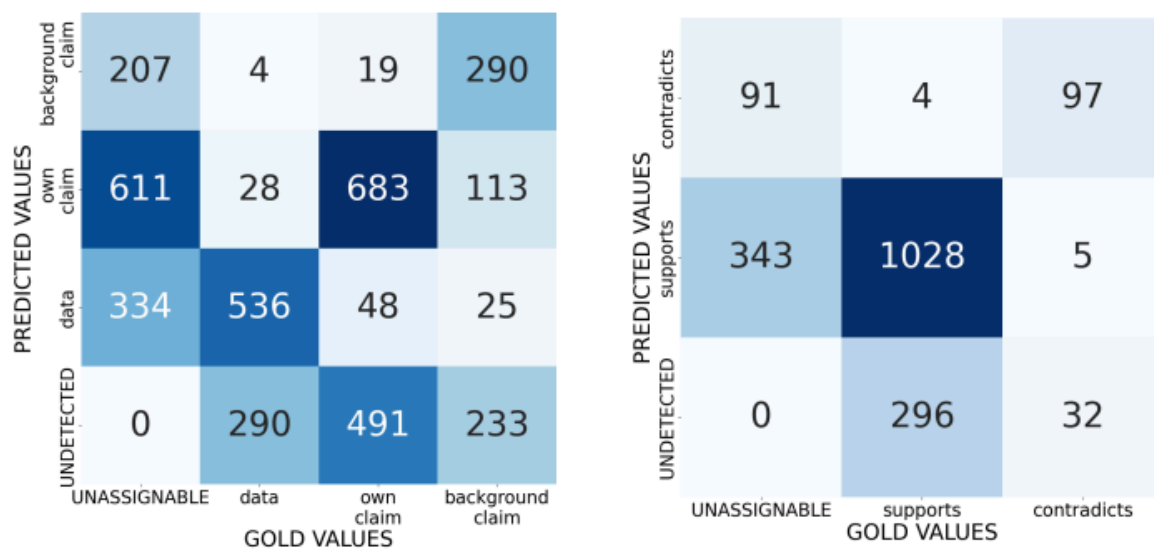


Figure 3: Confusion matrices for ADU recognition (left) and argumentative RE (right).