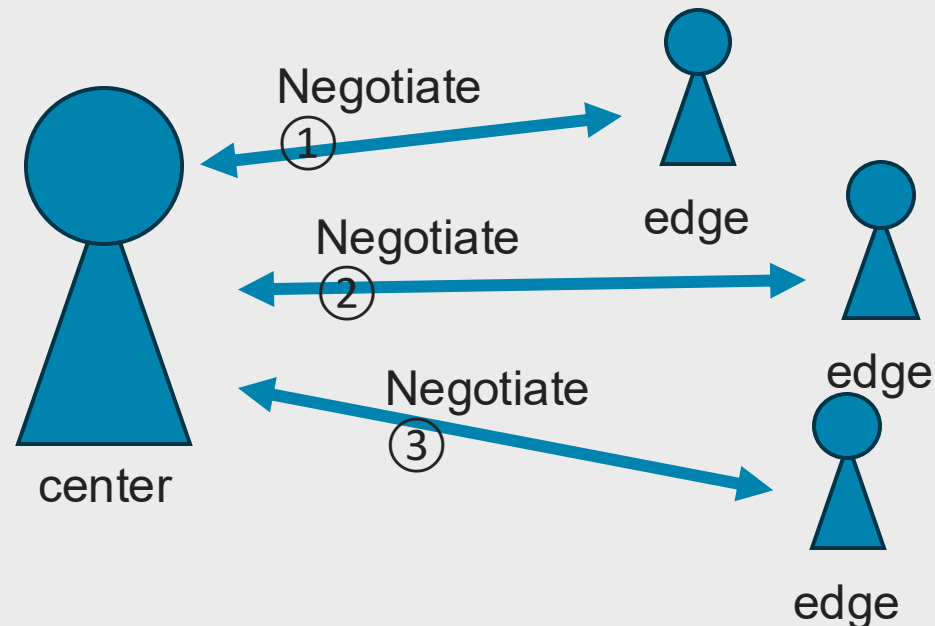


UfunATAgent

An agent submitted to ANAC 2025 ANL League
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Problem in this competition

- Negotiate with some agents.
 - We negotiate some agents one after another.
 - The result of negotiation affects following negotiation.
 - We should think agents negotiating after the negotiation end.



Bidding Strategy

- A LSTM model
 - Input: five negotiation history
 - each history has four data
 - Flag which indicates propose or respond
 - The current offer ufun
 - The relative time of the negotiation
 - Flag which indicates center or edge agent

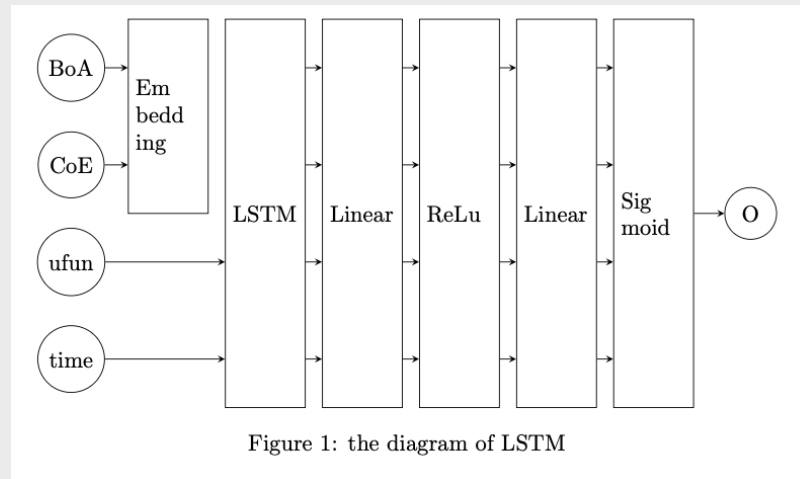
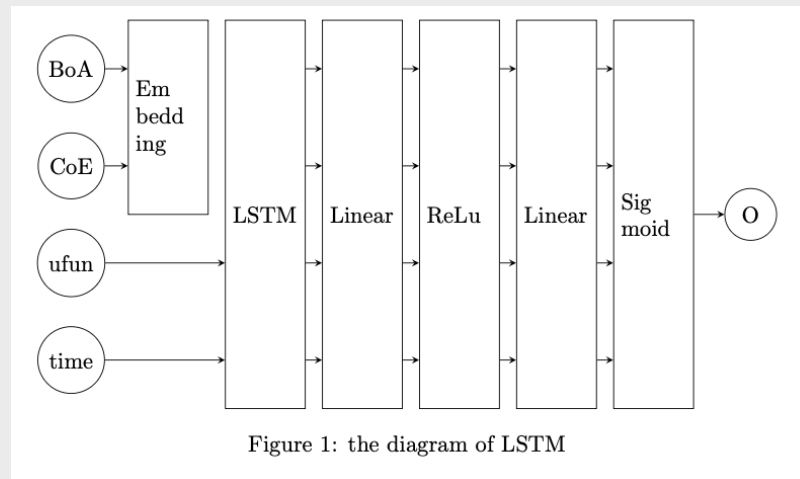


Figure 1: the diagram of LSTM

Bidding Strategy

- A LSTM model
 - output: one ufun
 - It indicates median of range which specify the outcome of Bidding Strategy



Acceptance Strategy

- It uses same LSTM model
 - But output doesn't indicate same.
 - The output ufun is threshold.
 - If the ufun is higher than min of range, it will accept
 - If not, it will reject
- It has another Strategy, compromise.
 - If negotiation takes too much time
 - Agent will accept even if the ufun is smaller than output