1. What *actually* was done?
2. What was the *experiment (with numbers and results)*?
3. What *ideas from ToM* were used?
4. What is the *solution architecture*?
5. They used concept from ToM (theory of mind ) to create a concept for AI. which is proposed to train a machine to build models which have ability to represent the mental health of others including their desires, beliefs and intentions. This model is built by machine learning algorithm which was observing others algo.
6. Main idea of this project (“TOMNET”)is to understand and observe and study other digitally intellectually designed architectures/software. TomNet idea uses meta-learning to build models of the agents which takes answer from observations of their behaviour separately. There are 5 different methods with 5 outputs.

5 methods were:

1. Random agents (ToMnet learns ~ Bayers-optimal hierarchical inference over agents)
2. Interfering goal-directed behaviour ( performs few-shot inverse reinforcement learning)
3. Learning to model deep RL agents (learns to characterise different species of deep reinforcement learning agents,capturing the essential factors of variations)
4. Acting based on false beliefs(POMDP)
5. Explicitly inferring belief states

If we will use POMDP as a model ,the observer may need to factor in the likely knowledge state of the agent and its cognitive limitation when making behavioural predictions.

3)Inspiration came from human Theory of Mind and look to build a system which learns to model other agents, including their desires, beliefs and intentions.

4. ToMnet architecture consist of 3 modules

1)Character net

2)Mental state net

3)prediction net

Architecture itself has two inputs past trajectories, recent trajectory which are in building to one network .