# CONCLUSION

In this paper, we have proposed a personality-aware product recommendation system based on interest mining and meta path discovery, the system predicts the user’s needs and the associated items. Products recommendation is computed by analyzing the user’s topical interest, and eventually recommend the items associated with the those interests. The proposed system is personality-aware from two aspects, firstly because it incorporates the user’s personality traits to predict his topics of interest. Secondly, it matches the user’s personality facets with the associated items. Experimental results show that the proposed system outperforms the state-of-art schemes in terms of precision and recall especially in the cold start phase for new items and users.

However, Meta-Interest could be improved in different aspects:

1) In this work, the users’ personality traits measurement was conducted through questionnaires. Integrating automatic personality recognition system, that can detect the users’ personality traits based on their shared data, into Meta-Interest is one of our future directions.

2) The proposed system uses Big-Five to model the user’ personality . Extending Meta-Interest to include other personality traits models such as the Myers–Briggs type indicator is a future direction.

3) The proposed system could be further improved by integrating a knowledge graph and infer topic-item association using semantic reasoning.