

Research Literature

An Annotated Bibliography

Riley Miller (rileymiller@mymail.mines.edu)
Colorado School of Mines

October 31, 2019

References

- [1] H. S. H. Cheng L. Koc J. Harmsen T. Shaked T. Chandra H. Aradhye G. Anderson G. Corrado W. Chai M. Ispir R. Anil Z. Haque L. Hong V. Jain X. Liu, “Wide & deep learning for recommender systems,” in *Proceedings of the 1st Workshop on Deep Learning for Recommender Systems*, September 2016.

Cheng et al. implemented a combination of wide and deep learning to surface relevant content to users on the Google Play store. They used the two different techniques to combat some of the model fallacies that can appear in recommender systems. <https://dl.acm.org/citation.cfm?id=2988454>

- [2] D. Rémy and J. Vouillon, “Objective ML: An effective object-oriented extension to ML,” *Theory And Practice of Objects Systems*, vol. 4, no. 1, pp. 27–50, 1998.

I need to write about this.

- [3] K. Thearling, B. Becker, and D. DeCosta, “Visualizing data mining models,” in *Proc. Integration of Data Mining and Data Visualization Workshop*, 1998.

Kurt Thearling et al. provide an excellent review of the most recent work in the arena of data visualization. Although the work is not intended for IVE applications, most of the ideas

were instrumental in understanding some of the inherent difficulties in data visualization. For example, from this work it became evident to us that *orienteering* is one of the most important aspects in an IVE. This indicates that it is important to examine possible solutions to properly orient the user early in the project. Some of the ideas presented includes maintaining a grid that defines the three axes (x, y, z) and the notion of a companion menu that, when invoked, aids the user in locating and transporting themselves within the environment. The authors also emphasize the importance of “trusting the model.” Trust here refers to the user’s ability to comfortably rely on the methods provided to correctly interpret the visual presentation at hand.