# **Machine Learning Papers**

### Yu-Hsiang Lin

#### **Abstract**

Papers in machine learning that I find interesting.

## 1. Information Retrieval

# 1.1. Neural Ranking

#### 1.1.1. **REVIEW**

An introduction (Mitra & Craswell, 2018).

Actually a review of recommender systems (Zhang et al., 2019).

### 1.1.2. MODELS

Deep Structured Semantic Model (DSSM) (Huang et al., 2013).

Multiple document fields (Zamani et al., 2018).

Neural Factorization Machines (He & Chua, 2017).

# References

He, X. and Chua, T.-S. Neural factorization machines for sparse predictive analytics. In *Proceedings of the 40th International ACM SIGIR Conference on Research and Development in Information Retrieval*, SIGIR '17, pp. 355364, New York, NY, USA, 2017. Association for Computing Machinery. ISBN 9781450350228. doi: 10.1145/3077136.3080777. URL https://doi.org/10.1145/3077136.3080777.

Huang, P.-S., He, X., Gao, J., Deng, L., Acero, A., and Heck, L. Learning deep structured semantic models for web search using clickthrough data. ACM International Conference on Information and Knowledge Management (CIKM), October 2013. URL https://www.microsoft.com/en-us/research/publication/

learning-deep-structured-semantic-models-for-web-search-using-clickthrough-data/.

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Mitra, B. and Craswell, N. An introduction to neural information retrieval. Foundations and Trends in Information Retrieval, 13(1):1-126, December 2018. URL https://www.microsoft.com/en-us/research/publication/introduction-neural-information-retrieval/.

Zamani, H., Mitra, B., Song, X., Craswell, N., and Tiwary, S. Neural ranking models with multiple document fields. In *Proceedings of the Eleventh ACM International Conference on Web Search and Data Mining*, WSDM '18, pp. 700708, New York, NY, USA, 2018. Association for Computing Machinery. ISBN 9781450355810. doi: 10.1145/3159652.3159730. URL https://doi.org/10.1145/3159652.3159730.

Zhang, S., Yao, L., Sun, A., and Tay, Y. Deep learning based recommender system: A survey and new perspectives. *ACM Comput. Surv.*, 52(1), February 2019. ISSN 0360-0300. doi: 10.1145/3285029. URL https://doi.org/10.1145/3285029.