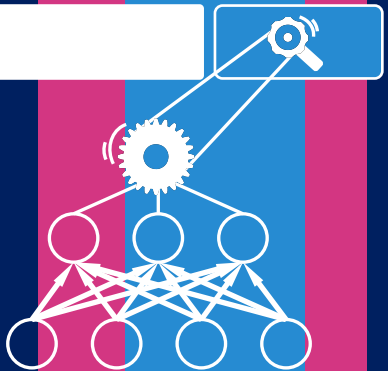
Neural Networks for Information Retrieval

nn4ir



Neural Networks for Information Retrieval

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NN4IR@SIGIR2017

Who are we?

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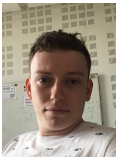

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Aims

Describe the use of neural network based methods in information retrieval

Compare architectures

Summarize where the field is, what seems to work, what seems to fail

Provide an overview of applications and directions for future development of neural methods in information retrieval

Structure of the tutorial

Morning

1. Preliminaries
2. Semantic matching 1
3. Semantic matching 2

Afternoon

4. Learning to rank
5. Modeling user behavior
6. Generating responses
7. Outlook
8. Wrap up

Materials

Slides available at `http://nn4ir.com`

Bibliography available at `http://nn4ir.com`

Lecture notes: B. Mitra and N. Craswell. An introduction to neural information retrieval. Foundations and Trends in Information Retrieval, 2017, under review. `http://bit.ly/neuralir-intro`

Survey: K.D. Onal et al. Neural information retrieval: At the end of the early years. Information Retrieval Journal, 2017, under review.

Outline

Morning program
- Preliminaries
- Text matching I
- Text matching II

Afternoon program
- Learning to rank
- Modeling user behavior
- Generating responses
- Wrap up