Neural Networks for Information Retrieval

## **Neural Networks for Information Retrieval**

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## Who are we?



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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

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## Structure of the tutorial

## Morning

- 1. Preliminaries
- 2. Modeling user behavior
- 3. Semantic matching
- 4. Learning to rank

#### Afternoon

- 5. Entities
- 6. Generating responses
- 7. Recommender systems
- 8. Industry insights
- 9. Q & A

## **Materials**

Slides available at http://nn4ir.com/wsdm2018

Bibliography available at http://nn4ir.com/wsdm2018

Survey 1 An introduction to neural information retrieval [Mitra and Craswell, 2017] Survey 2 Neural information retrieval: at the end of the early years [Onal et al., 2017]

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## Outline

# Morning program

Preliminaries

Modeling user behavior

Semantic matching

Learning to rank

## Afternoon program

**Entities** 

Generating responses

Recommender systems

Industry insights

Q & A