Neural Networks for Information Retrieval
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Hosein Azarbonyad\textsuperscript{1}  Alexey Borisov\textsuperscript{1,2}  Mostafa Dehghani\textsuperscript{1}  Tom Kenter\textsuperscript{3}  Bhaskar Mitra\textsuperscript{4,5}  Maarten de Rijke\textsuperscript{1}  Christophe Van Gysel\textsuperscript{1}

\textsuperscript{1}University of Amsterdam

\textsuperscript{2}Yandex

\textsuperscript{3}Booking.com

\textsuperscript{4}University College London

\textsuperscript{5}Microsoft

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Who’s here today and who are we?

Tom Kenter
Booking.com

Maarten de Rijke
U. Amsterdam

Bhaskar Mitra
Microsoft & UCL

Christophe Van Gysel
U. Amsterdam
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
3. Learning to rank
4. Entities

Afternoon
5. Modeling user behavior
6. Generating responses
7. Recommender systems
8. Industry insights
9. Q & A
Materials

Slides available at http://nn4ir.com/ecir2018

Bibliography available at http://nn4ir.com/ecir2018

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]
Outline

**Morning program**
- Preliminaries
- Semantic matching
- Learning to rank
- Entities

**Afternoon program**
- Modeling user behavior
- Generating responses
- Recommender systems
- Industry insights
- Q & A