1 Natural Language Processing Background

- Basic concepts

- Pretrained language models

Supplemental Readings


2 Question Answering for Structured Data


Supplemental Readings


3 Semantic Parsing for Dialogue Agents


Supplemental Readings
- Data acquisition for dialogue state tracking (WOZ)
- Dialogue semantics
- Dialogue state tracking
4 Large Language Models


Supplemental Readings


5 Advanced Natural Language Understanding Topics

5.1 Multi-lingual Assistants


5.2 Error Recovery


5.3 Text-Based Question Answering


Supplemental Readings


5.4 Chatty Dialogues


6 Assistant Architectures

6.1 The Anatomy of Virtual Assistants


6.2 Multimodal Assistants


Supplemental Readings


6.3 Automatic Speech Recognition and Speech Synthesis

