

2019 年，智能问答（Question Answering）的主要研究方向有哪些？

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来自专辑

卖萌屋@自然语言处理



前言

自从小夕前不久推送了这篇《[文本匹配打卡点总结](#)》，收到了不少小伙伴对于问答方向的问题，其中问的最多的就是，求！更！多！论！文！好了，于是小夕就在万能的知乎上找到了这篇良心回答，分享给有需要的小伙伴们~下面的内容就转载自知乎用户Y.Shu的回答，传送门如下（关注问答、阅读理解的小伙伴们快去关注一波良心答主）

<https://www.zhihu.com/question/349499033/answer/900173774>

非事实类问题

大多数研究关注于事实类问题，而非事实类问题的研究相对不足，包括数学类的问题、判断类的问题等。

[EMNLP 2019] NumNet: Machine Reading Comprehension with Numerical Reasoning 数学类问题

[NAACL19] MathQA: Towards Interpretable Math Word Problem Solving with Operation-Based Formalisms

[NAACL19] BoolQ: Exploring the Surprising Difficulty of Natural Yes/No Questions

多跳推理

多跳 (multi-hop) 在最近的顶会上关注度非常高，目前实现这一机制的方法也比较复杂。

[EMNLP 2019] What's Missing: A Knowledge Gap Guided Approach for Multi-hop Question Answering

[EMNLP 2019] Self-Assembling Modular Networks for Interpretable Multi-Hop Reasoning

[EMNLP 2019] Avoiding Reasoning Shortcuts: Adversarial Evaluation, Training, and Model Development for Multi-Hop QA

[ACL 2019] Multi-Hop Paragraph Retrieval for Open-Domain Question Answering

[ACL 2019] Dynamically Fused Graph Network for Multi-hop Reasoning

[ACL 2019] Explore, Propose, and Assemble: An Interpretable Model for Multi-Hop Reading Comprehension

[ACL 2019] Multi-hop Reading Comprehension through Question Decomposition and Rescoring

[ACL 2019] Compositional Questions Do Not Necessitate Multi-hop Reasoning

[ACL 2019] Answering while Summarizing: Multi-task Learning for Multi-hop QA with Evidence Extraction

[ACL 2019] Cognitive Graph for Multi-Hop Reading Comprehension at Scale

[ACL 2019] Understanding Dataset Design Choices for Multi-hop Reasoning

[NAACL 2019] Repurposing Entailment for Multi-Hop Question Answering Tasks

[NAACL 2019] BAG: Bi-directional Attention Entity Graph Convolutional Network for Multi-hop Reasoning Question Answering

[ACL 2019] Exploiting Explicit Paths for Multi-hop Reading Comprehension

[ACL 2019] Multi-hop reading comprehension across multiple documents by reasoning over heterogeneous graphs

多语言/跨语言的问答

包括英法德等主流语言之间的研究，也包括特定于使用人数较少的语言的研究。

[EMNLP 2019] Cross-Lingual Machine Reading Comprehension

[EMNLP 2019] BiPaR: A Bilingual Parallel Dataset for Multilingual and Cross-lingual Reading Comprehension Novels

[ACL 2019] XQA: A Cross-lingual Open-domain Question Answering Dataset

知识库问答和基于文本的问答的结合

前者通常是限定域的, 知识容量有限, 结构化信息比较好查询; 后者通常是开放域的, 信息量很大, 但是提取知识比较困难。

[EMNLP 2019] Language Models as Knowledge Bases? 探索语言模型作为知识来源的可能性

[ACL 2019] Interpretable Question Answering on Knowledge Bases and Text

[ACL 2019] Enhancing Pre-Trained Language Representations with Rich Knowledge for Machine Reading Comprehension

[EMNLP 2019] Incorporating External Knowledge into Machine Reading for Generative Question Answering

长文本/多段落

MRC 的研究在向多段落/长文本扩展。

[EMNLP 2019] BookQA: Stories of Challenges and Opportunities

[ACL 2019] Simple and Effective Curriculum Pointer-Generator Networks for Reading Comprehension over Long Narratives

[ACL 2019] ELI5: Long Form Question Answering

[ACL 2018] Multi-Passage Machine Reading Comprehension with Cross-Passage Answer Verification

[ACL 2019] Token-level Dynamic Self-Attention Network for Multi-Passage Reading Comprehension

[EMNLP 2019] Multi-passage BERT: A Globally Normalized BERT Model for Open-domain Question Answering

[ACL 2019] Retrieve, Read, Rerank: Towards End-to-End Multi-Document Reading Comprehension

[ACL 2019] Multi-hop reading comprehension across multiple documents by reasoning over heterogeneous graphs

[EMNLP19] PullNet: Open Domain Question Answering with Iterative Retrieval on Knowledge Bases and Text

QA 系统的可解释性

比如可以将对答案的解释也作为训练数据的一部分, 让模型学会解释。

[NAACL 2019] Enhancing Key-Value Memory Neural Networks for Knowledge Based Question Answering

[EMNLP 2017] QUINT: Interpretable Question Answering over Knowledge Bases

[ACL 2019] Interpretable Question Answering on Knowledge Bases and Text

[ACL 2019] Explore, Propose, and Assemble: An Interpretable Model for Multi-Hop Reading Comprehension

不可回答的问题

这个问题包括无法回答的问题和合理答案的判别两个任务。

[AAAI 2019] Read + Verify: Machine Reading Comprehension with Unanswerable Questions

[ACL 2019] Learning to Ask Unanswerable Questions for Machine Reading Comprehension

数据集的构建

更实用、智能、强大的 QA 系统需要更多优质的数据集来推动。

[EMNLP 2019] BiPaR: A Bilingual Parallel Dataset for Multilingual and Cross-lingual Reading Comprehension on Novels 多语言与跨语言的小说阅读理解

[EMNLP 2019] GeoSQA: A Benchmark for Scenario-based Question Answering in the Geography Domain at High School Level 高中地理场景下的问答基准测试

[EMNLP 2019] Quoref: A Reading Comprehension Dataset with Questions Requiring Coreferential Reasoning 共指解析问题

[IJCAI 2019] AmazonQA: A Review-Based Question Answering Task 基于评论的问答

[EMNLP 2019] BiPaR: A Bilingual Parallel Dataset for Multilingual and Cross-lingual Reading Comprehension Novels 多语言和跨语言阅读理解小说的双语并行数据集

[ACL 2019] XQA: A Cross-lingual Open-domain Question Answering Dataset 跨语言开放域问答数据集

[ACL 2019] WEETQA: A Social Media Focused Question Answering Dataset 社交媒体问答数据集

[EMNLP 2019] A Span-Extraction Dataset for Chinese Machine Reading Comprehension 中文阅读跨度提取数据集

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