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Additional Readings for XCS224U

Domain adaptation for supervised sentiment

- Recursive Deep Models for Semantic Compositionality Over a Sentiment Treebank
- DynaSent: A Dynamic Benchmark for Sentiment Analysis
- Contextual Word Representations: A Contextual Introduction
- The Pile: An 800GB Dataset of Diverse Text for Language Modeling
- Advances in Neural Information Processing Systems 30 (NIPS 2017)
- The Annotated Transformer
- Self-Attention with Relative Position Representations
- Improving Language Understanding by Generative Pre-Training
- BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding
- RoBERTa: A Robustly Optimized BERT Pretraining Approach
- ELECTRA: PRE-TRAINING TEXT ENCODERS AS DISCRIMINATORS RATHER THAN GENERATORS
- Exploring the Limits of Transfer Learning with a Unified Text-to-Text Transformer
- BART: Denoising Sequence-to-Sequence Pre-training for Natural Language Generation,
 Translation, and Comprehension
- Distilbert, a distilled version of Bert: smaller, faster, cheaper and lighter
- Diffusion-LM Improves Controllable Text Generation

Retrieval augmented in-context learning

- Building Scalable, Explainable, and Adaptive NLP Models with Retrieval
- ColBERT: Efficient and Effective Passage Search via Contextualized Late Interaction over BERT
- Dense Passage Retrieval for Open-Domain Question Answering
- SPLADE: Sparse Lexical and Expansion Model for First Stage Ranking
- Retrieval-Augmented Generation for Knowledge-Intensive NLP Tasks
- Language Models are Few-Shot Learners
- Training language models to follow instructions with human feedback
- Chain-of-Thought Prompting Elicits Reasoning in Large Language Models

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- Internet-augmented language models through few-shot prompting for open-domain question answering
- Demonstrate-Search-Predict: Composing retrieval and language models for knowledge-intensive NLP

Advanced behavioral evaluation

- Adversarial Examples for Evaluating Reading Comprehension Systems
- Breaking NLI Systems with Sentences that Require Simple Lexical Inferences
- Inoculation by Fine-Tuning: A Method for Analyzing Challenge Datasets
- Stress Test Evaluation for Natural Language Inference
- Adversarial NLI: A New Benchmark for Natural Language Understanding
- Dynabench: Rethinking Benchmarking in NLP
- COGS: A Compositional Generalization Challenge Based on Semantic Interpretation
- ReCOGS: How Incidental Details of a Logical Form Overshadow an Evaluation of Semantic
 Interpretation

Analysis methods

- "Why Should I Trust You?": Explaining the Predictions of Any Classifier
- BERT Rediscovers the Classical NLP Pipeline
- Axiomatic Attribution for Deep Networks
- Faithful, Interpretable Model Explanations via Causal Abstraction
- Inducing Causal Structure for Interpretable Neural Networks
- <u>Finding Alignments Between Interpretable Causal Variables and Distributed Neural</u>
 <u>Representations</u>
- Thread: Circuits What can we learn if we invest heavily in reverse engineering a single neural network?

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NLP methods

- The Handbook of Computational Linguistics and Natural Language Processing
- Linguistic Structure Prediction by Noah A. Smith
- Dynaboard: An Evaluation-As-A-Service Platform for Holistic Next-Generation Benchmarking
- Moving Beyond Downstream Task Accuracy for Information Retrieval Benchmarking

Your projects

- Advice for Research Students
- Stuart Shieber on reporting research results
- Novelist Cormac McCarthy's tips on how to write a great science paper
- Geoff Pullum's Five Golden Rules
- Patrick Blackburn: How to give a good talk
- Datasheets for Datasets
- Model Cards for Model Reporting