Feb 17

Kenneth Church

https://aclanthology.org/events/acl-2022/#2022acl-long

↑ up

pdf (full)
bib (full)

Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)

pdf bib

Proceedings of the 60th Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers)
Smaranda Muresan | Preslav Nakov | Aline Villavicencio

pdf bib abs

AdapLeR: Speeding up Inference by Adaptive Length Reduction
Ali Modarressi | Hosein Mohebbi | Mohammad Taher Pilehvar

pdf bib abs

Quantified Reproducibility Assessment of NLP Results
Anya Belz | Maja Popovic | Simon Mille

pdf bib abs

Rare Tokens Degenerate All Tokens: Improving Neural Text Generation via Adaptive Gradient Gating for Rare Token Embeddings
Sangwon Yu | Jongyoon Song | Heeseung Kim | Seongmin Lee | Woo-Jong Ryu | Sungroh Yoon

pdf bib abs

AlephBERT: Language Model Pre-training and Evaluation from Sub-Word to Sentence Level
Amit Seker | Elron Bandel | Dan Bareket | Idan Brusilovsky | Refael Greenfeld | Reut Tsarfaty

pdf bib abs

Learning to Imagine: Integrating Counterfactual Thinking in Neural Discrete Reasoning
Moxin Li | Fuli Feng | Hanwang Zhang | Xiangnan He | Fengbin Zhu | Tat-Seng Chua

pdf bib abs

Domain Adaptation in Multilingual and Multi-Domain Monolingual Settings for Complex Word Identification
George-Eduard Zaharia | Răzvan-Alexandru Smădu | Dumitru Cercel | Mihai Dascalu

pdf bib abs

JointCL: A Joint Contrastive Learning Framework for Zero-Shot Stance Detection

https://github.com/kwchurch/ACL2022_deepnets_tutorial

README.md

T1: A Gentle Introduction to Deep Nets and Opportunities for the Future

Materials for ACL-2022 tutorial T1: T1: A Gentle Introduction to Deep Nets and Opportunities for the Future

Abstract

The first half of this tutorial will make deep nets more accessible to a broader audience, following "Deep Nets for Poets" and "A Gentle Introduction to Fine-Tuning." We will also introduce, GFT (general fine tuning), a little language for fine tuning deep nets with short (one line) programs that are as easy to code as regression in statistics packages such as R using glm (general linear models). Based on the success of these methods on a number of benchmarks, one might come away with the impression that deep nets are all we need. However, we believe the glass is half-full: while there is much that can be done with deep nets, there is always more to do. The second half of this tutorial will discuss some of these opportunities
Quick Links:

1. Videos 📽️
   i. 📽️ 10 minute TEASER (for both halves)
   ii. 🆕📽️ First half (1 hour 16 minutes) UNABRIDGED (YouTube); mirror of above (Bilibili)
2. gft code
3. paper
4. longer journal paper on gft (general fine-tuning)
5. Slides
   i. pdf
   ii. 3 pptx files and 1 more pptx file

https://github.com/kwchurch/Benchmarking_past_present_future

Invited Speakers

We have an amazing collection of invited talks, many with
insights for the future.

1. Past
    i. John Makhoul
    ii. Mark Liberman
    iii. Ellen Voorhees
    iv. John Mashey
2. Present
    i. Nan Duan, Qi Zhang and Ming Zhou
    ii. Hua Wu and Jing Liu
    iii. Neville Ryant
    iv. Brian MacWhinney and Saturnino Luz
    v. Douwe Kiela
    vi. Eunsol Choi
    vii. Anders Søgaard
3. Future
    i. Greg Diamos, Peter Mattson and David Kanter
    ii. Dave Ferrucci
    iii. Ido Dagan
    iv. Samuel Bowman

README.md

Speaker: Dave Ferrucci

Founder & CEO, Elemental Cognition
davef@ec.ai
ec.ai
📽️ talk (hosted on: Vimeo)
📽️ talk (hosted on: YouTube)
📽️ talk (hosted on: bilibili)
📙 slides (hosted on: github)

Title: Machine Understanding in Context

The ability for machines to read, understand and reason about natural language would dramatically transform the knowledge economy across all industries. Today's latest Deep Learning marvels do not understand what they read to the extent required for rational problem solving and transparent decision making. And yet we need machines to read, understand and engage with us at a rational level for us to take responsibility for their predictions. A potential problem slowing the advancement of natural language understanding may be that we are not ambitiously or rigorously defining what it means to comprehend language in the first place. Current metrics and tests may be insufficient to drive the right results. In this talk, I will present a definition of comprehension and early experimental results that strongly suggest existing systems are not up to the task. I will also demonstrate a system architecture and behavior that reflects the sort of language understanding capabilities we envision would do better to advance the field of NLU.

Bio: Dave Ferrucci is an award-winning Artificial Intelligence researcher who started and led the IBM Watson team from its inception through its landmark Jeopardy success in 2011. Dr. Ferrucci's more than 25 years in AI and his passion to see computers fluently think, learn, and communicate inspired him to found Elemental Cognition in

Keynotes

- Alchemy
  - https://www.youtube.com/watch?v=x7psGHgatGM
- Metcalfe's Law
  - https://www.youtube.com/watch?v=f6CJA421aUo
  - https://youtu.be/Fj7r3vYAjGY
- https://github.com/kwchurch/Benchmarking_past_present_future/
  - Watson
    - https://www.youtube.com/watch?v=P18EdAKuC1U
  - Jurafsky
    - https://www.superlectures.com/interspeech2016/ketchup-interdisciplinarity-and-the-spread-of-innovation-in-speech-and-language-processing

Commencement Speeches & More…

Commencement Speeches

- Kai-Fu Lee
  - https://web.archive.org/web/20170801054115/https://www.engineering.columbia.edu/kai-fu-lee-speech
- Steve Jobs
  - https://youtu.be/UF8uR6Z6KLc

Other Speeches

- Steve Jobs
  - Superbowl ads
    - Practice (friendly audience)
      - https://www.youtube.com/watch?v=zlQvMp5rB6g
    - Higher stakes
      - https://www.youtube.com/watch?v=1tQ5XwvjPmA
  - Kai-Fu Lee (then)
    - https://drive.google.com/file/d/0B5QfqZms4UpjNDVYSzdhNm5pSkk/view?resourcekey=0-pke1vF9mbuWUMrWsLeSFqA
    - https://youtu.be/_6Fm3q7R8iQ
  - Rabbit (now)
    - https://www.youtube.com/watch?v=daVcXde3QJE
    - https://www.youtube.com/watch?v=Rqh6fhcAqpw
  - Why Xerox failed
    - https://www.youtube.com/watch?v=NlBjNmXvqIM
  - Snark
    - https://youtu.be/ZWaX1g_2SSQ
  - Steve Jobs and Bill Gates
    - https://youtu.be/ntZ14BAFMyo
  - Woz
    - https://www.youtube.com/watch?v=iW1BulWR9dI

Memorials:

Who is the audience?
What is the Point?

- Jobs (Woz)
  - https://www.youtube.com/watch?v=dK_XEGrzHUo
- Minsky (Hillis)
  - https://youtu.be/PnLdPo1Lz-8
- Buckley (Chomsky)
  - https://www.youtube.com/watch?v=57mi_RpaZr4
- Coffin Confessor
  - https://www.thisamericanlife.org/766/well-someone-had-to-do-something/act-three-11
  - https://youtu.be/ty-U5DvaVtk