

Presentation Matters:

How to Communicate Science in the NLP Venues and in the Wild?

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Tutorial at The 62nd Annual Meeting of the Association for Computational Linguistics,
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Disclaimer

These are our personal views on the subject matter based on our career experience. Please always double check the formal guidelines of ACL, the board of your professional community, publication venues, social media platforms, and your workplace.

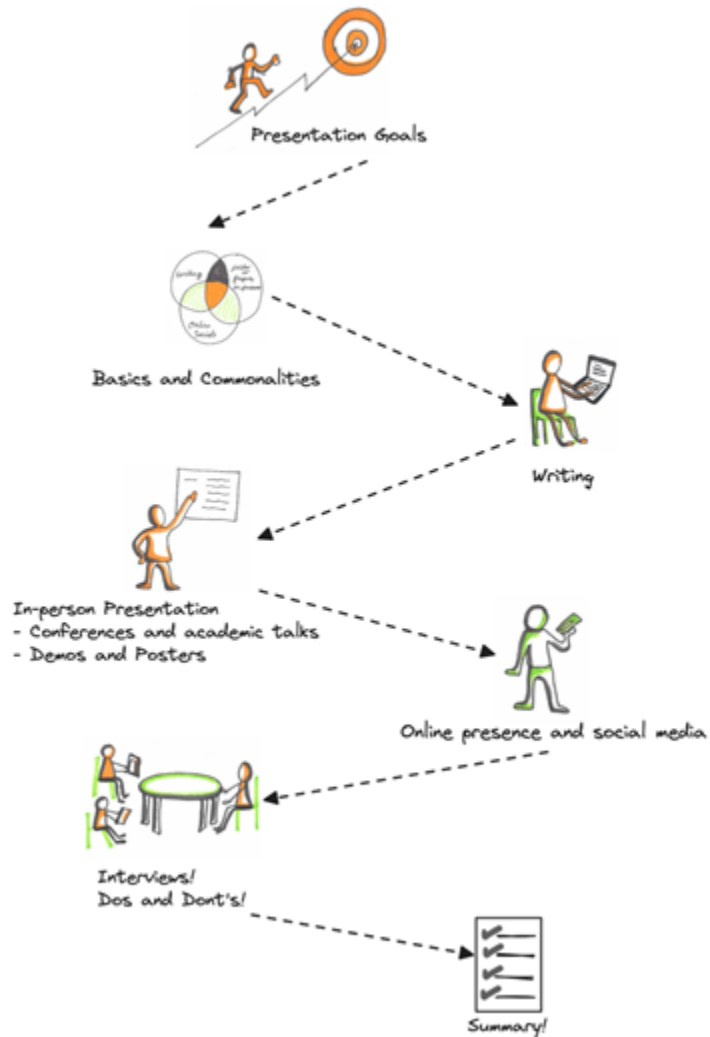


Scientific communication comes in different forms

- Writing ACL papers
- Oral Presentation
- Poster and Demo Presentation
- Social media
- Interviews



Tutorial outline



First things first

- What idea do you want to convey?
- Identify your audience - you will need to ensure your communication is tailored to them
- How do you want people to perceive you/remember you?



What do you want to convey?

- What is the take home message: if someone needs to summarise your talk (poster, paper) to a colleague, what should they say?
- and/or what action do you want them to take? (e.g., participate in a user study - give you a job)

Note: Audience will only remember **3** things




Know your audience

- You are presumably the expert for this talk
- Not everyone will be an expert - even at a technical conference
- You want to ensure everyone will understand you and will care about what you are presenting



Basics and commonalities: what we can't say enough!

- Prepare - Prepare - Prepare... 
- Know what you are talking about
- Make a **story** out of what you want to convey
- Everything you say **must** be related to that story
- Be careful with the use of generative AI for writing
- Be aware of time or space limits - and ensure you fit into them

Writing *ACL papers



Advice

- Don't wait: Write
- Identify your key idea
- Tell a story
- Highlight your contributions
- Related Work: Later
- Put your readers first
- Listen to your readers
- Language and Style
- Use of GenAI
- Paper Types
- Other Advice!

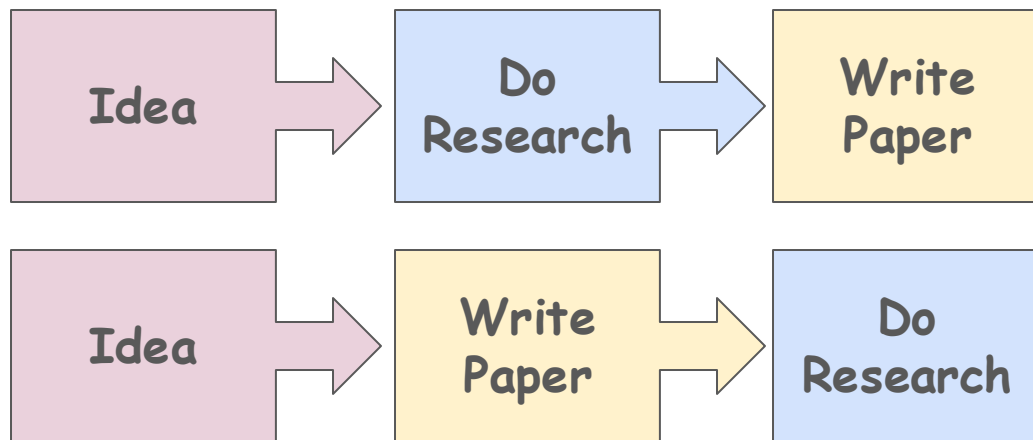
Acknowledgments

Throughout this part, some slides are adapted from Dr Simon Peyton Jones and Prof Guilin Qi; we are thankful to them.

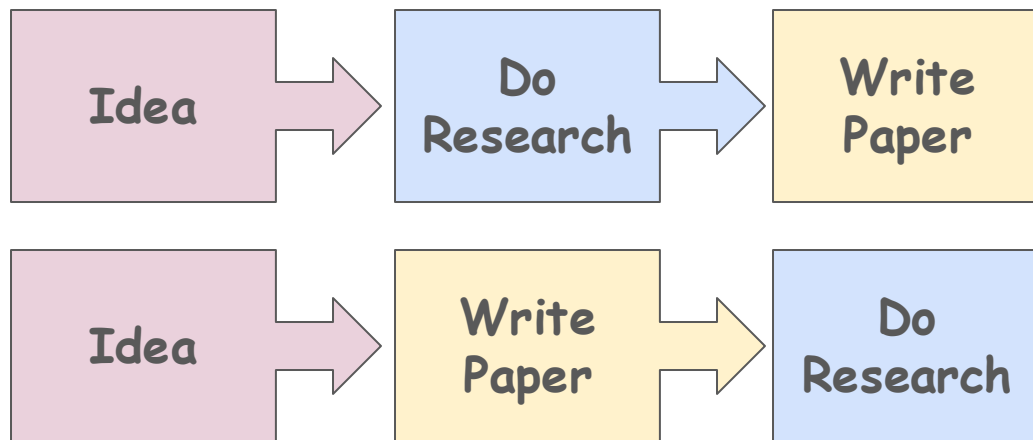
Writing Papers: Model



Writing Papers: Model



Writing Papers: Model



- Writing papers is a primary mechanism for doing research (not just for reporting it)
 - Forces us to be clear and focused
 - Crystallises what we don't understand
 - Facilitates collaboration and getting feedback from others
 - Some people may use slides to 'write/describe' the initial structure of the work

Advice

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- Other Advice!

Papers Communicate Ideas

- The goal is to infect the mind of your reader with your idea
 - The greatest ideas are worthless if you keep them to yourself
- Motivate your idea!
 - Why it's important? Why people should care?
- Clearly formulate your research questions (RQs)
 - To enable drawing interesting conclusions
 - Your ideas to address those RQs
 - Proper evaluation setup, experiments, and evidence



Papers Communicate Ideas

- Fallacy: You need a fantastic idea before you can write a paper
 - Write a paper about your little idea and discuss it with your supervisor/peers
 - Usually it's expanded to a bigger & more interesting idea
- Your paper should have just one clear idea
 - If you have lots of ideas, write multiple papers
- Many papers contain good ideas, but do not distil what they are
 - Make sure the reader is in no doubt what the idea is and be explicit about it
 - “The main idea of the paper is...”
 - “In this section, we present the main contribution of the paper..”

Just One Clear Idea!

Word Representation Models for Morphologically Rich Languages in Neural Machine Translation

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Abstract

Dealing with the complex word forms in morphologically rich languages is an open problem in language processing, and is particularly important in translation. In contrast to most modern neural systems of translation, which discard the identity for rare words, in this paper we propose several architectures for learning word representations from character and morpheme level word decompositions. We incorporate these representations in a novel machine translation model which jointly learns word alignments and translations via a hard attention mechanism. Evaluating on translating from several morphologically rich languages into English, we show consistent improvements over strong baseline methods, of between 1 and 1.5 BLEU points.

with a heavy tail distribution. For example in Russian, there are at least 70 words for dog, encoding case, gender, age, number, sentiment and other semantic connotations. Many of these words share a common lemma, and contain regular morphological affixation; consequently much of the information required for translation is present, but not in an accessible form for models of neural MT.

In this paper, we propose a solution to this problem by constructing word representations compositionally from smaller sub-word units, which occur more frequently than the words themselves. We show that these representations are effective in handling rare words, and increase the generalisation capabilities of neural MT beyond the vocabulary observed in the training set. We propose several neural architectures for compositional word representa-

.04217v1 [cs.NE] 14 Jun 2016

Advice

- Don't wait: Write
- Identify your key idea
- **Tell a story**
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- Related Work: Later
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- Listen to your readers
- Language and Style
- Use of GenAI
- Paper Types
- Other Advice!

Tell a Story

Imagine you are explaining at a whiteboard

- Here is a problem
- It's an interesting problem
- It's an unsolved problem
- Here is my idea
- My idea works (detailed empirical analysis)
- Here's how my idea compares to other people's approaches



Structure (Method Paper)

- Title (1000 readers)
- Abstract (1 paragraph, 100 readers)
- Introduction (1 page, 100 readers)
- My Approach & Idea to the Problem (2-3 pages, 10 readers)
- The Details & Experiments (2-3 pages, 5 readers)
- Related Work (1 page, 10 readers)
- Conclusions (0.3 pages, 100 readers)
- Ethics/Limitations/Social Impact (0.5 pages, 100 readers)



Advice

- Don't wait: Write
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The Introduction/Abstract

- Describe the problem clearly and state your contributions
 - Fit the Introduction into 1 page!

Direct Evaluation of Chain-of-Thought in Multi-hop Reasoning with Knowledge Graphs

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 Yuan-Fang Li[✉] Thuy-Trang Vu[✉] Gholamreza Haffari[✉]
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[✉]VinAI Research, Vietnam
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Abstract

Large language models (LLMs) have demonstrated strong reasoning abilities when prompted to generate chain-of-thought (CoT) explanations alongside answers. However, previous research on evaluating LLMs has solely focused on answer accuracy, neglecting the correctness of the generated CoT. In this paper, we delve deeper into the CoT reasoning capabilities of LLMs in multi-hop question answering by utilizing knowledge graphs (KGs). We propose a novel discriminative and generative CoT evaluation paradigm to assess LLMs' knowledge of reasoning and the accuracy of the generated CoT. Through experiments conducted on 5 different families of LLMs across 2 multi-hop question-answering datasets, we find that LLMs possess sufficient knowledge to perform reasoning. However, there exists a significant disparity between answer accuracy and faithfulness of the CoT generated by LLMs, indicating that they often arrive at correct answers through incorrect reasoning.!

1 Introduction

While large language models (LLMs) have shown great potential as general-purpose task solvers, they tend to be unreliable reasoners (Bang et al., 2023). Prior research suggests that LLMs demonstrate reasoning-like behaviors as the number of parameters increases (Wei et al., 2022). Notably, Chain-of-Thought (CoT) prompting, where LLMs are ex-

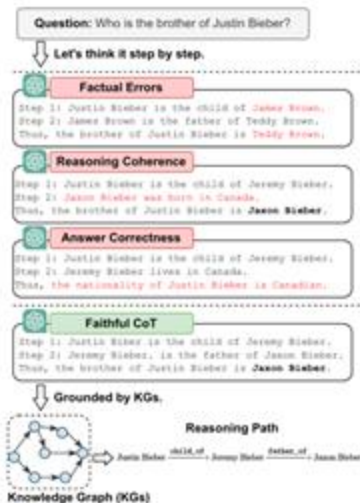


Figure 1: Examples of different reasoning errors and a faithful CoT grounded by knowledge graph.

Previous research measures the reasoning ability of LLMs by reporting their performance, e.g. accuracy, on the downstream tasks that require reasoning (Huang and Chang, 2023). This evaluation strategy cannot provide a direct assessment of the reasoning steps. Hence, it remains unclear

The Introduction/Abstract

- Describe the problem clearly and state your contributions
 - Fit the Introduction into 1 page!
- Write the list of contributions first
 - It drives the paper
 - The reader thinks “if they can really deliver this, that’s exciting; I’d better read on”
- We propose IMO, a novel top-down greedy layer-wise sparse representation learning method for pre-trained text encoders for robust OOD classification by sharply reducing task-specific spurious correlations. In comparison with bottom-up layer-wise and simultaneous search across all layers, we discover that the top-down greedy search is decisive for performance improvement.
- We develop a theoretical framework that elucidates the relationship between domain-invariant features and causal features. Additionally, we provide an explanation of how our method learns invariant features.

Contributions Should be Refutable

- Your Introduction makes claims
 - The body of the paper provides evidence to support each claim
 - Don't overstate your contributions!
- Check each claim in the introduction
 - Identify the evidence, and forward-reference it
- Evidence
 - It can be analysis and comparisons, theorems, case studies, etc




No “rest of this paper is...”

- Not:
 - “The rest of this paper of structured as follows. Section 2 introduces the problem. Section 3...”
- Instead:
 - The introduction (including the contributions) should survey the whole paper, thus forward reference every important part
- I revise the “Introduction” and “Abstract” at the very end
 - After finalising: “Problem/Approach”, “Experiments”, “Related Works”

Advice

- Don't wait: Write
- Identify your key idea
- Tell a story
- Highlight your contributions
- **Related Work: Later**
- Put your readers first
- Listen to your readers
- Language and Style
- Use of GenAI
- Paper Types
- Other Advice!

Structure (Conference Papers)

- Title (1000 readers)
- Abstract (1 paragraph, 100 readers)
- Introduction (1 page, 100 readers)
- **Related Work (1 page, 10 readers)** 
- My Approach & Idea to the Problem (2-3 pages, 10 readers)
- The Details & Experiments (2-3 pages, 5 readers)
- Conclusions (.3 pages, 100 readers)
- Ethics/Limitations/Social Impact (.5 pages, 100 readers)

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Gets Between the Reader and Your Idea!



Your Reader



Your Idea

Hard to Understand for the Reader

- The reader know nothing about the problem yet!
 - So your (highly compressed) description of various technical tradeoffs is incomprehensible!
- But need to situate the work early in the paper
 - I usually have a paragraph in the Introduction
 - More detailed literature coverage is done in the Related Work section

Credit

- Fallacy: To make my work look good, I have to make other people's work look bad
 - Not the right & helpful approach!
- Warmly acknowledge
 - Previous/Current work related to or is the basis of your work
 - People who have helped you
 - Weakness/Limitation in your approach compared to others

Advice

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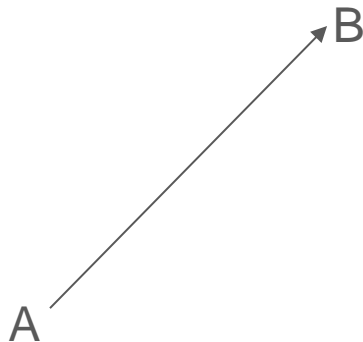
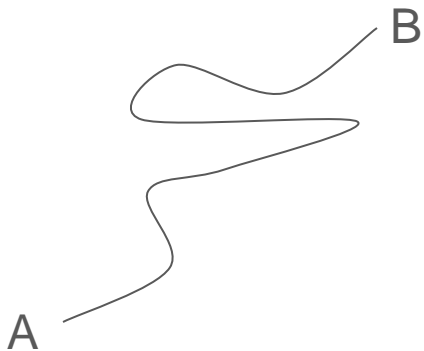
Structure (Method Paper)

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Putting The Readers First

- Do not present your personal journey of discovery!
 - This becomes part of you and forms the way you think about the project
- Detach yourself and instead think how it can be best explained to others
 - Choose the most direct route to the idea
 - It's like linearising the 3D structure of DNA into a sequence (cf: Jason Eisner)



Presenting the Idea

- Explain it as if you were speaking to someone using a whiteboard
- Convey the intuitions
 - It's the primary goal, not the secondary!
 - Once the reader gets the intuitions, they can follow the details (not vice versa)
- Conveying the intuition can be best done by examples!
 - Present the general case afterwards

Abstract

Large language models (LLMs) have demonstrated strong reasoning abilities when prompted to generate chain-of-thought (CoT) explanations alongside answers. However, previous research on evaluating LLMs has solely focused on answer accuracy, neglecting the correctness of the generated CoT. In this paper, we delve deeper into the CoT reasoning capabilities of LLMs in multi-hop question answering by utilizing knowledge graphs (KGs). We propose a novel discriminative and generative CoT evaluation paradigm to assess LLMs' knowledge of reasoning and the accuracy of the generated CoT. Through experiments conducted on 5 different families of LLMs across 2 multi-hop question-answering datasets, we find that LLMs possess sufficient knowledge to perform reasoning. However, there exists a significant disparity between answer accuracy and faithfulness of the CoT generated by LLMs, indicating that they often arrive at correct answers through incorrect reasoning.

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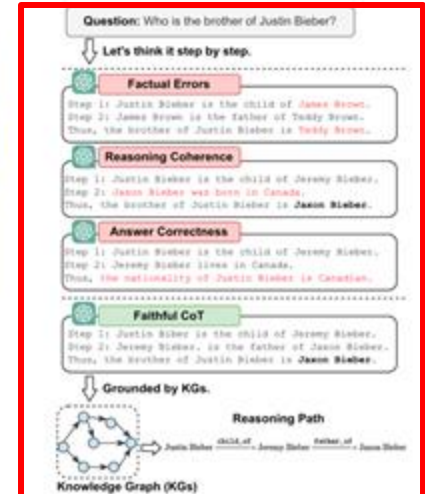


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Ethics/Limitations/Social Impact

- Adhere to the ethics guidelines of ACL as well as your workplace
 - Particularly important when involving human, e.g., data annotation, evaluation
 - For example, research that involves working with harmful content
- Limitations
 - Genuinely mention the limitations of your work and what could have been done
 - Helpful for others to do follow up on your research
 - Helpful to you as your work gets noticed and cited more
- Social Impact
 - The impact of NLP on users' lives
 - Exclusion, Overgeneralisation, Exposure

The Social Impact of Natural Language Processing

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Advice

- Don't wait: Write
- Identify your key idea
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- Highlight your contributions
- Related Work: Later
- Put your readers first
- **Listen to your readers**
- Language and Style
- Use of GenAI
- Paper Types
- Other Advice!

Getting Help from Peers

- Get your paper read by as many colleagues/peers as possible
 - Both experts and non-experts!
- Each reader most probably can read your paper only once
 - So use them wisely!
- Explain carefully the kind of feedback you want
 - For example, logic-level vs English, etc

Listening to Your Reviewers

- Treat reviews very valuable!
 - Be (truly) grateful for criticism & praise
 - This is very hard but very important!
 - Occasionally there may be non-useful reviews as well, don't get discouraged! You may escalate to the ACs!
- Take criticism as a positive suggestion for something you could do better
 - Perceive as constructive feedback!
 - Better explanation, better experimental setup and evaluation, better analysis
- Rebuttal
 - Thank the reviews warmly; they give up their time for you!
 - Objectively address as many comments as possible
 - Don't take it personal, the goal is to improve the work

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Basic Points



- Submit by the deadline!
- Adhere to the guidelines
 - Keep to the length restrictions
 - Don't change the margin, font size, line space, etc
- Make use of the appendix
 - To provide more supporting evidence, results, examples, etc
- Always use a spell checker!

Use the Active Voice!

The passive voice is respectable but it deadens your paper!

Don't 	Do 
It can be seen that..	We can see that..
35 tests were run	We ran 35 tests
These properties were thought desirable	We wanted to retain these properties
It might be thought that this would be a type of error	You might think this is a type of error

Use Simple Direct Language

Don't 	Do 
The object under study was displaced horizontally	The ball moved sideways
Endeavour to ascertain	Find out
On annual basis	Yearly
It could be considered that the speed of storage reclamation left something to be desired	The garbage collector was slow

Visual Structure

- Give a nice visual structure to your paper
 - Sections and subsections, bullets, italics, etc
 - The place of the tables and figures
- Simplified tables and charts
- Find out how to draw nice figures and use them!

Constant Revisions

- Constantly rereading & thinking from the perspective of a reader
 - Are these terms & acronyms defined properly
 - Are the uses of anaphora & pronouns clear
 - Is there a consistent tense and style
 - Are the figures and tables clearly explained
- Make sure the data/code is noticeable by the reviewers/readers
 - Making code/data available is highly recommended
 - You may upload them to the submission website but they may not get noticed!
 - Make sure you point out code/data explicitly in the paper, e.g., Abstract/Intro
- Have a checklist before the submission and double check them

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Use of GenAI and LLMs

- “Defensive Writing”: Avoid obvious gaps that can be picked up by “Reviewer 2”
 - Example query in ChatGPT

Consider reviewing for an AI conference, such as NAACL, ICLR or ICCV. Authors complain about reviewers who give simple general phrases that can be hard to rebut and can be applied to just about anything: "you need more data for evaluation", "the description of the algorithm is imprecise", "you haven't cited recent literature", "you need comparisons with more recent algorithms", ... Can you list a number of these phrases?
 - This gives a good checklist of things to double check against
- Beware of LLMs’ hallucinations and non-up-to-date knowledge
 - Don’t rely on them for “Related Work”
- Adhere to ACL guidelines for the use of GenAI
 - Watch out for this space

Advice

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- Language and Style
- Use of GenAI
- **Paper Types**
- Other Advice!

Types of papers

1. **Methodology paper:** new methods (models or frameworks)
2. **Analysis paper:** comprehensive evaluation of existing methods
3. **Data paper:** new datasets or benchmarks, possibly with new tasks and a simple method
4. **Survey paper:** summary of recent work in a field or a task

For different types of papers the writing of the paper will be different, let's consider abstract and introduction to illustrate this

Methodology Papers

ACL 2019 Best paper

Abstract

Neural Machine Translation (NMT) generates target words sequentially in the way of predicting the next word conditioned on the context words. At training time, it predicts with the ground truth words as context while at inference it has to generate the entire sequence from scratch. This discrepancy of the fed context leads to error accumulation among the way. Furthermore, word-level training requires strict matching between the generated sequence and the ground truth sequence which leads to overcorrection over different but reasonable translations. In this paper, we ad-

One sentence to summarise task

First Challenge

Second Challenge

Zhang W, Feng Y, Meng F, et al. Bridging the gap between training and inference for neural machine translation[J]. arXiv preprint arXiv:1906.02448, 2019.

Methodology Papers

ACL 2019 Best paper

Abstract

sonable translations. In this paper, we address these issues by sampling context words not only from the ground truth sequence but also from the predicted sequence by the model during training, where the predicted sequence is selected with a sentence-level optimum. Experiment results on Chinese→English and WMT'14 English→German translation tasks demonstrate that our approach can achieve significant improvements on multiple datasets.

Method summarisation

Experimental results

Zhang W, Feng Y, Meng F, et al. Bridging the gap between training and inference for neural machine translation[J]. arXiv preprint arXiv:1906.02448, 2019.

Methodology Papers

ACL 2019 Best paper

Introduction

Neural Machine Translation has shown promising results and drawn more attention recently. Most NMT models fit in the encoder-decoder framework, including the RNN-based (Sutskever et al., 2014; Bahdanau et al., 2015; Meng and Zhang, 2019), the CNN-based (Gehring et al., 2017) and the attention-based (Vaswani et al., 2017) models, which predict the next word conditioned on the previous context words, deriving a language model over target words. The scenario is at training time the ground truth words are used as context

Starting with the introduction of the task and its value, then short summary of existing methods

Zhang W, Feng Y, Meng F, et al. Bridging the gap between training and inference for neural machine translation[J]. arXiv preprint arXiv:1906.02448, 2019.

Analysis Paper-Example

ACL 2019 Paper on neural extractive summarisation

Abstract

The recent years have seen remarkable success in the use of deep neural networks on text summarization. However, there is no clear understanding of *why* they perform so well, or *how* they might be improved. In this paper, we seek to better understand how neural extractive summarization systems could benefit from different types of model architectures, transferable knowledge and learning schemas. Additionally, we find an effective way to improve current frameworks and achieve the state-of-the-art result on CNN/DailyMail by a large margin based on our observations and analyses. Hopefully, our work could provide more clues for future research on extractive summarization. Source code will be available on Github¹ and our project homepage².

Task and background

Research gap in existing work, namely the aspects that have not been evaluated and analysed.

Key aspects to analyse

Significance of the analysis

Zhong M, Liu P, Wang D, et al. Searching for Effective Neural Extractive Summarization: What Works and What's Next[C]//Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics. 2019: 1049-1058.

Analysis Paper-Example

ACL 2019 Paper on neural extractive summarisation

Introduction

Empirically, our main observations are summarized as:

1) Architecturally speaking, models with auto-regressive decoder are prone to achieving better performance against non auto-regressive decoder. Besides, LSTM is more likely to suffer from the architecture overfitting problem while Transformer is more robust.

2) The success of extractive summarization system on the CNN/DailyMail corpus heavily relies on the ability to learn positional information of the sentence.

3) Unsupervised transferable knowledge is more useful than supervised transferable knowl-

Analytical papers generally do not discuss method contributions, but rather present observations; summarise the conclusions derived from the experiments.

Zhong M, Liu P, Wang D, et al. Searching for Effective Neural Extractive Summarization: What Works and What's Next[C]//Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics. 2019: 1049-1058.

Analysis Paper-Example

ACL 2019 Paper on neural extractive summarisation

Introduction

edge since the latter one is easily influenced by the domain shift problem.

4) We find an effective way to improve the current system, and achieving the state-of-the-art result on CNN/DailyMail by a large margin with the help of unsupervised transferable knowledge (42.39 R-1 score). And this result can be further enhanced by introducing reinforcement learning (42.69 R-1 score).

Hopefully, this detailed empirical study can provide more hints for the follow-up researchers to design better architectures and explore new state-of-the-art results along a right direction.

Some analytical work involves proposing a very simple improvement strategy based on observations, further enhancing the contribution of the paper.

Zhong M, Liu P, Wang D, et al. Searching for Effective Neural Extractive Summarization: What Works and What's Next[C]//Proceedings of the 57th Annual Meeting of the Association for Computational Linguistics. 2019: 1049-1058.

Data Paper-Example

ACL 2023 Paper on non-factoid question answering

Abstract

Answering non-factoid questions (NFQA) is a challenging task, requiring passage-level answers that are difficult to construct and evaluate. Search engines may provide a summary of a single web page, but many questions require reasoning across multiple documents. Meanwhile, modern models can generate highly coherent and fluent, but often factually incorrect answers that can deceive even non-expert humans. There is a critical need for high-quality resources for multi-document NFQA (MD-NFQA) to train new models and evaluate answers' grounding and factual consistency in relation to supporting documents.

One sentence to summarise task

Challenges
Gap of existing benchmark

Bolotova-Baranova V, Blinov V, Filippova S, et al. WikiHowQA: A comprehensive benchmark for multi-document non-factoid question answering[C]//Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers). 2023: 5291-5314.

Data Paper-Example

ACL 2023 Paper on non-factoid question answering

Abstract

To bridge this gap, we present WIKIHOWQA,¹ a new multi-document NFQA benchmark built on WikiHow, a website dedicated to answering “how-to” questions. The benchmark includes 11,746 human-written answers along with 74,527 supporting documents. We describe the unique challenges of the resource, provide strong baselines, and propose a novel human evaluation framework that utilizes highlighted relevant supporting passages to mitigate issues such as assessor unfamiliarity with the question topic. All code and data, including the automatic code for preparing the human evaluation, are publicly available.

Briefly summarise the name of the dataset, data statistics, and its characteristics.

Bolotova-Baranova V, Blinov V, Filippova S, et al. WikiHowQA: A comprehensive benchmark for multi-document non-factoid question answering[C]//Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers). 2023: 5291-5314.

Data Paper-Example

ACL 2023 Paper on non-factoid question answering

to generate an answer. However, even relatively straightforward questions like “how to fix my computer issue” can have multiple solutions, requiring the user to manually search through multiple retrieved documents to find the one that applies to their situation. Complex questions such as “how to feel calm and relaxed” may require an aggregated summary of the most popular methods from multiple relevant sources. There are also questions for which answers have yet to be written, requiring a QA system to treat relevant documents as initial sources of information and then to reason out an answer based on them. For example, the question “how to prepare to buy a house in [neighbourhood], [city]” would require the system to retrieve relevant documents about buying houses in general and specific articles about the local house market and the neighbourhood, and then construct a more sophisticated answer through reasoning rather than just summarizing multiple documents.

Introduction

Mention the difficulties and challenges involved in completing this dataset to further highlight the contributions.

Bolotova-Baranova V, Blinov V, Filippova S, et al. WikiHowQA: A comprehensive benchmark for multi-document non-factoid question answering[C]//Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers). 2023: 5291-5314.

Data Paper-Example

ACL 2023 Paper on non-factoid question answering

Introduction

and in our work, we leverage WikiHow to create a high-quality benchmark specifically designed for MD-NFQA within the INSTRUCTION question category. Our benchmark consists of 11,746 questions from the INSTRUCTION category, each paired with a corresponding human-written answer, sourced from a diverse range of WikiHow articles. Each QA pair is supported by corresponding parsed relevant HTML pages from which the answer can be derived (Fig. 1). We evaluate several baseline models on the new benchmark that could serve as lower and upper bounds for model performance.



Figure 1: An instance of proposed WikiHowQA

Introduce the statistical data of the new benchmark. Highlight the challenges.

Use a **figure** to describe the format of the dataset (task).

Bolotova-Baranova V, Blinov V, Filippova S, et al. WikiHowQA: A comprehensive benchmark for multi-document non-factoid question answering[C]//Proceedings of the 61st Annual Meeting of the Association for Computational Linguistics (Volume 1: Long Papers). 2023: 5291-5314.

Advice

- Don't wait: Write
- Identify your key idea
- Tell a story
- Highlight your contributions
- Related Work: Later
- Put your readers first
- Listen to your readers
- Language and Style
- Use of GenAI
- Paper Types
- **Other Advice!**

Know the Audience: Write for Different Audience Groups

- Audience Group A
 - Reach research specialists, immediate colleagues, the 20-50 other people in the world who know a lot about the topic
 - Their feedback helps strengthening the work
- Audience Group B
 - The "knowledgeable", the other 200-1000 who would like to know more so need some support while reading
 - Reach this second group if they want high citations

Well-being

- You need to get a break from writing to take you mind completely off it
 - Come back in later with a fresh perspective
 - A walk in nature, a cold shower, a day trip away, a relaxing evening followed by a good night's sleep, etc
- Sleep and the subconscious mind are great at resolving problems
 - Think carefully about the problem, then walk away from it and come back later
- Never sit for too long writing, the mind just slows down
- Make an initial submission well-before the deadline!
 - Keep revising and resubmitting
 - Helps your well-being! (avoid short-time submission stress)



Take Home Messages!

- Practice, practice, practice!
 - Get your supervisors/peers to review your writing
 - Learn from the feedback (backprop the difference in your neural net)
- Get the content down, ignoring fancy writing
 - Best done with bullets
- Try and do all the major experimental work ahead of time
 - But expect to need to do a bunch of additional things later on
- Adhere to the submission guidelines
 - Use simple, clear, and direct language with a nice visual structure
 - Important: Choose the right track when submitting to get the right reviewers

Oral Presentation

Narrative, structure and content

Some tips

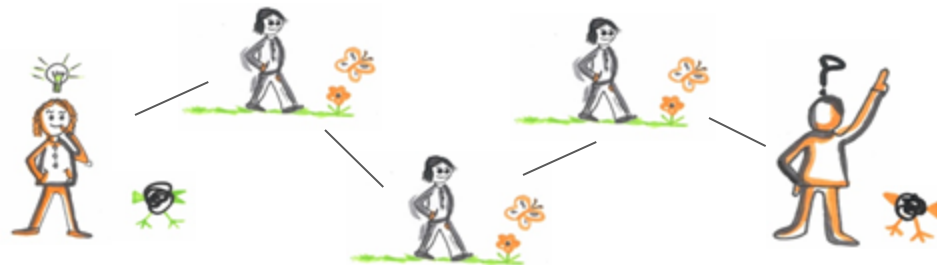


Preparation

Presenting

Now you know your take-home message...

- *Make a story of what you want to tell*
- Make it compelling: motivate the problem (or idea) you are addressing: you want to capture your audience
- Make the aims of your talk clear at the outset
- Slides should then follow your narrative and structure



Tips for your slides: DO's and DON'Ts – The DO's



- Always have a separate title slide

Presentation Matters:

How to Communicate Science in the NLP Venues and in the Wild?

Sarvnaz Karimi, Cecile Paris, Reza Haffari

Tutorial at The 62nd Annual Meeting of the Association for Computational Linguistics, Bangkok, Thailand, 2024

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Tips for your slides: DO's and DON'Ts – The DO's



- Always have a separate title slide
- Think of the role of each of your slide
- Choose your slide titles with care
- Back up your claims
- Recap at the end of each major segment of your talk
- Repeat your take-home message at the end

Presentation Matters:

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Tips for your slides: DO's and DON'Ts – **More DO's**



- Explain terms that might be unfamiliar to the audience
- Be consistent



Tips for your slides: DO's and DON'Ts – **More DO's**



- Explain terms that might be unfamiliar to the audience
- Be consistent
- Use (meaningful) examples, graphics and illustrations
- Make your slides attractive
- Make sure everything is readable (and understandable)
- Thank collaborators



But we need to do more...



Tips for your slides: DO's and DON'Ts – the DON'Ts



- Don't clutter the slides with too much **information** - it's hard to read and listen at the same time and most people can't do both; but they will try and the result means that they will neither listen to you correctly or read properly - as a result they will not get anything of what you say and be left baffled (or worse bored)
- Avoid long **sentences** - it's hard to read long sentences. Make your statement in the slides as concise as possible.
- Avoid cut-and-paste from the paper (including captions for figures) - again, that's too much text. In all likelihood, it will be too small to read and people will have no idea what you are talking about. You want your paper to be an advertisement for your paper so that people go and read the paper.
- Bullet points should be consistent in their syntax.
- Generally you want to avoid inconsistencies: of spelling, of terminology, of fonts, etc
- Don't provide all the details - again, you want people to read your paper. You can **mention** that more details are included in the paper. Again, you want your talk to be an advertisement for your paper - not the whole thing.
- Don't use **colours** which are **hard to see** (and think of people who are colour blind - There are more than you think!)
[what is this saying?]
- And don't use colours just for the sake of it - **people** will try to attribute meaning to them
- Don't use jargon or acronyms - you will lose a lot of the audience
- Don't have a last slide which simply says "**Questions?**" or "**Thank you**" - it's a useless slide and it's a waste of people's attention while they are asking questions

$$S(q, d) = \beta(\alpha \sum_{t \in q \cap d} f(t) + (1 - \alpha) \frac{\vec{q} \cdot \vec{d}}{|\vec{q}| |\vec{d}|}), \quad (3)$$

Tips for your slides: DO's and DON'Ts – **the DON'Ts**

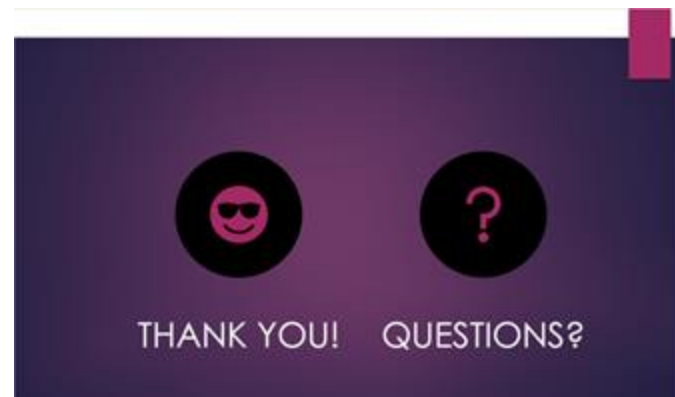
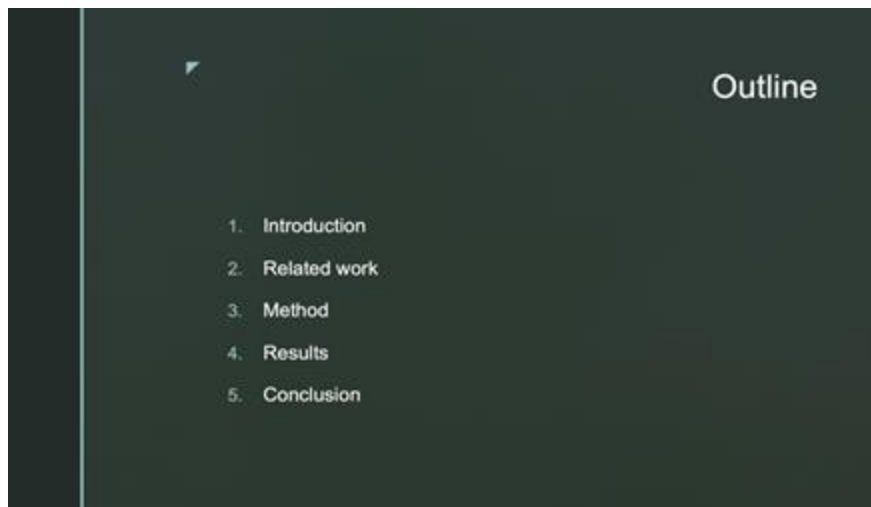
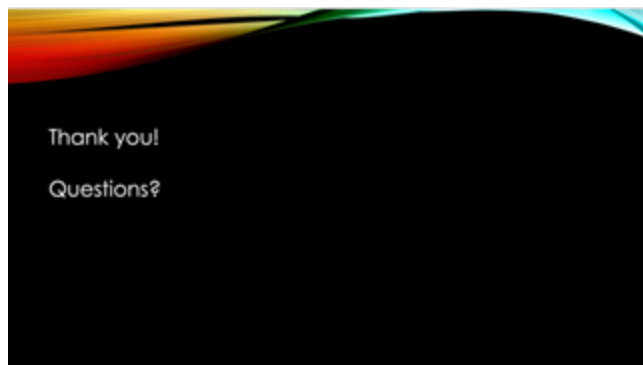


- Clutter the slides with too much information
- Employ long sentences or cut-and-paste from the paper
- Provide all the details
- Use jargon or acronyms; have a slide full of equations
- Criticise prior work

Tips for your slides: DO's and DON'Ts – **the DON'Ts**



- Clutter the slides with too much information
- Employ long sentences or cut-and-paste from the paper
- Provide all the details
- Use jargon or acronyms; have a slide full of equations
- Criticise prior work
- Have a last slide which simply says “Questions?” or “Thank you”



Outline

What is In-context learning (ICL)?

Applications of ICL in information extraction

Benchmarking results of ICL for NER

Comparison to other methods

Findings

Outlines are suitable for
long presentations (>20mins)



Summary

- Finding 1
- Finding 2
- Finding 3

Contact: Name <email>

Generative AI as part of the process of creating knowledge, writing and publishing process needs to be embraced, as there are exciting opportunities, **but with care**

The Collaborative Intelligence Research Programme looks at the questions to address to be addressed



Cecile Paris & Patrick Cooper
Firstname.lastname@csiro.au

With thanks to Andrew Reeson, the Humans and
Machines Group and the whole CINTEL team

Generative AI

Small things can make a big difference

- Use colours which are easy to see and distinguish [can you read this?]
- If you use colours, make sure they mean something - people will try to attribute meaning to them
- Repeat slides rather than navigate forwards and backwards
- Always number slides
- Check your grammar and spelling
- Check the syntax and punctuation of bulleted list of items



Getting prepared: prior to the presentation

- Know what you are talking about (we can't say it enough!)
- Rehearse, rehearse, rehearse – **at least once** with an audience
- Time yourself: make sure your talk will not run over the allotted time - **without having to rush and speak too fast!**
- Learn your script so that you can engage with the audience - don't read what's on the slides



Getting prepared: Using the tools

- Make sure you are familiar with all the basic machinery
- In particular, ensure you know how to advance slides
- Arrive early for the session to give you time

Presenting: Speaking

- Articulate, breathe and pause
- Adopt a lively tone
- Speak at an appropriate volume for the venue
- Be present
- Watch out for distracting verbal behaviours (e.g., “fillers”)



Presenting: Interacting with the Audience

- Don't start by apologising for feeling nervous
- Always look at the audience - but don't just look at 1 person!
- Try to avoid using/looking at notes

Presenting: Interacting with the Audience

- Don't start by apologising for feeling nervous
- Always look at the audience - but don't just look at 1 person!
- Try to avoid using/looking at notes
- Engage the audience by asking them a **relevant** question at the beginning (If you can)
- Only use humour if you are confident it will work
- Try to develop a relaxed style, but one that shows authority

Presenting: Body language

- Body language is really important
- Minimise nervous habits
- Remember to breathe
- Use the space available (if possible)
- Use your hands to add expression to your talk
- Point to things on the screen... But don't look at the screen behind you



Asking Questions

- Must come from a space of curiosity
- Articulate the question carefully and concisely
- Be friendly
- Thank the speaker



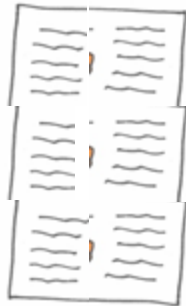
Posters



The Poster: again, an advertisement for your paper, your work and yourself

What it is not

- A set of slides put one next to the other
- Large bodies of text no one will want to read



What it is

- A narrative
- Attractive
- Informative
- Easy to read
- A take home message

Poster presentation is interactive

- One on one (or several) discussions
- Keep to your narrative and remember your take home message



Poster presentation is interactive

- One on one (or several) discussions
- Keep to your narrative and remember your take home message
- Be present and engaging - speak in the official language of the conference



Poster presentation is interactive

- One on one (or several) discussions
- Keep to your narrative and remember your take home message
- Be present and engaging - speak in the official language of the conference
- Meet other researchers in person and exchange ideas
- Expand your network even for the shy and introvert



Demo



Demos are the best way to show off new applications

- Some papers introduce a new tool or application
- Demos are the best way to present applications in practice
- Demos allows others to interact with the application and discuss it with you directly
- Demos may be an opportunity to get inspired for new features by others



Demos are interactive

- Introduce the problem you are solving
- Go through the demo slowly, explaining each step (and their purpose)
- Allow others to ask questions, interact with the application and discuss it with you directly
- Be careful to not click everywhere on the screen



From your experiences listening to talks.... Other tips?



Social Media

Blogs
LinkedIn
Twitter/X
Mastodon



*ACL Publicity
accounts

Social Media and Research Outreach

- It's fast!
- It can promote your research if done right
- It highlights what you want your audience to pay attention to
- It needs a take home message (like a “presentation”)
 - Must be very much to the point



Keep your posts genuine!

- Posts should be fact-based and you must be able to back them up (e.g., by a publication)
 - Otherwise it could ruin your reputation as researcher
 - It potentially is there forever
- People can sense show offs! Might not help your popularity

Drawbacks of relying on social media content

- Not peer-reviewed and therefore there is no quality control
 - Should not take claims as is and would need to verify them
 - Just because someone is a well-known researcher does not mean their claim is always correct, sometimes can be a trigger for discussions

Our LLM is better than any other in the world! As per one experiment on two datasets we happen to have!

Only success is shared

- Social media can make readers feel overwhelmed!
 - Not all share on social media platforms
 - Often only success is shared, not rejections

Our 4 papers got
rejected :-)

We had 10 papers
accepted at ACL!
Are you as good as us?

Short-text forums: What to share and how

- New publications
 - That ACL paper you got accepted or the new journal publication
 - TL;DR version: a perfect teaser
 - A link to the ACL anthology version for a full-version
- Upcoming talks
 - A title that is informative and attracts attention
 - Details on how to attend (Date, time, mode)
- A past event
 - A notable event that you either attended or presented
 - The idea you presented
 - Something you learned that is worth sharing



Nathan Schneider @complingy · Aug 4
 "informal #NLPProc survey" In an effort to improve the review process, ARR @ReviewACL has recently changed how author responses work. If you've recently submitted or reviewed, what do you think of the new format, where authors can engage in multi-turn discussions with reviewers?

5 1 5 3K

Show more replies

Nathan Schneider @complingy · Aug 4
 (3/3) On balance, based on your experience, which format do you prefer?

one-shot author response	26.8%
discussion-based	58.9%
no preference	7.1%
see results	7.1%

112 votes · Final results

1 473

Nathan Schneider @complingy · Aug 4
 (4/3) I'm basing this on my experiences as a(n)

author only	15.2%
reviewer only	3.8%
author & reviewer	74.3%

Aditya Joshi @aadi_joshi

Our proposal "A benchmark for sentiment and sarcasm classification for dialects of English" has received Google's Research Scholar grant that funds research by early-career profs. Will be hiring for one/two research roles based in Australia. Project co-Cl'ed by @diptesh

2:47 PM · Mar 30, 2024 · 4,569 Views

8 5 54 2

Post your reply Reply

Aditya Joshi @aadi_joshi · Mar 30
 The project marks the beginning of my research vision of contributing to NLP that is equitable to "all" speakers of English.

1 3 516

Seeks engagement from the NLP community for a poll that is of interest to many!

Promotes their work/recent grant.
 It shows their topic of expertise too.

Subbarao Kambhampati (కంభంపాటి సుబ్బారావు) @rao2z · Aug 4 ...

I am honored (& tickled) to be one of the keynote speakers at #ACL2024 in Bangkok!

While this would be my first ever @aclmeeting, it is such an exciting time with #NLProc rediscovering its #NLU roots and affinity to planning/reasoning in this era of LLMs!

Looking forward
[Show more](#)

Tuesday, August 13th:

08:30 – 16:30	Registration
09:00 – 10:00	Session 7: Plenary - Keynote Speaker: Subbarao Kambhampati Can LLMs Reason and Plan?
10:00 – 10:30	Break - Coffee, Tea and Pastry

Draws attention to their upcoming keynote, with all the details.

Carolyn Lawrence @caro__lawrence · Sep 8, 2022 ...

There is no single best explanation type - different situations require different types of explanations. Here is an overview of some popular explanation types from explainable AI research. Feel free to let me know if you think I forgot something important.

Explanation Types

- Global**
Explain entire AI model
e.g., decision tree
Decision Tree & Other Transparent Models
Earn more than 10,000 EUR per year? → Approved
Defaulted on any credit? → No
- Local**
Explain a particular input's prediction
 - Feature-based**
Parts of the input are highlighted as explanation
Input: The product is awesome
Explanation: Words in the input are highlighted: darker means more important for prediction
Prediction: Positive sentiment
 - Training Instance**
Explain by showing most similar training instances
Input: [Image of a blue car]
Explanation: [Image of a blue car]
Prediction: car
 - Counterfactual**
Explain how input has to differ to lead to a different prediction
Input: Earns 49,000 EUR, 0 defaulted credit
Explanation: If she earns 50,000 EUR, she will get the credit
Prediction: Deny credit

Shows knowledge of the subject, yet invites others for contribution!

Blogs

- Writing about a topic of interest, such as explaining your latest publication for the general public
- Each post focuses on one topic only
- It should be self-contained to be understood!
 - Figures and tables should be explained
 - Formulas and equations should be self-contained



Blogs are not papers

Paper

Formal

Sell your idea

Audience: Reviewers, Researchers

All details are needed

Blog post

Formal/Informal

Tease your idea so the readers read your paper

Audience: General public, Researchers who want the gist of your work

No need to provide all the details (e.g., equations can be skipped)

Adopted from Carolin Lawrence's slides on Scientific Writing for Blog Posts

Results

ID	Model	nDCG@1000	nDCG@10	P@10	RR
1	BM25 (baseline)	0.487	0.619	0.330	0.563
2	BM25 (GPT formulation)	0.476	0.590	0.322	0.529
3	BM25 (GPT expansion)	0.496	0.641	0.354	0.535
4	BM25 (query & document enrichment)	0.364	0.624	0.476	0.627
5	BM25 (GPT exp.) + GPT_v	0.497	0.652	0.368	0.483
6	BM25 (GPT exp.) + SCT-BERT	0.496	0.657	0.389	0.522
7	BM25 (q&d enr.) + TCRR	0.370	0.684	0.584	0.642
8	BM25 (GPT exp.) + GPT_t	0.532	0.738	0.527	0.667
9	BM25 (q&d enr.) + TCRR + GPT_F	0.366	0.720	0.592	0.735
10	BM25 (q&d enr.) + TCRR + GPT_t	0.375	0.777	0.697	0.783
	Official TREC median	—	0.648	0.397	0.538
	System A	0.400	<u>0.811</u>	<u>0.735</u>	<u>0.785</u>
	System B [56]	0.299	0.638	0.627	—
	System C [57]	<u>0.532</u>	0.738	0.527	0.667
	System D [58]	0.487	0.639	0.362	0.519

Rybinski et al. Learning to Match Patients to Clinical Trials Using Large Language Models. 2024

Table 3: Ranking model evaluation on the TREC Clinical Trials 2023 collection. **Bold** values indicate the highest score in our experiment. Underlined values indicate the highest scores in official TREC evaluations.

ID	Model	nDCG@1000	nDCG@10	P@10	RR
1	BM25 (baseline)	0.487	0.619	0.330	0.563
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	System B [56]	0.299	0.638	0.627	—
	System C [57]	<u>0.532</u>	0.738	0.527	0.667
	System D [58]	0.487	0.639	0.362	0.519

What if we replace the table with this?

“We attain the best results with systems that leverage re-ranking with a trained LLM, which highlights the effectiveness of the proposed strategy to use the model's graded output directly in a re-ranking process via rank fusion.”

More details at: [DOI/URL](#).

Your audience defines the details needed!

General Audience	ML/NLP Researcher	Fellow researcher or someone in your exact field
Needs minimal details	Some details	Most details
Goal is to know why this is important and maybe challenges	What's that new trend or method in the field	Details of a related literature they need to know
Spend more on introduction and an understandable take-away message	Some introduction, some details of methods and what they can take to other fields	Least introductions, methods and results explained and why or how this will advance the field

Adopted from Carolin Lawrence and Barbara Plank slides on Scientific Writing for Blog Posts

LinkedIn



- Professional posts
 - Create an image of you and your work
 - Let others know that you are looking for new opportunities
- Announcements
 - Events that you may be organising (e.g., workshops)
 - Recent publication or talk
 - Significant milestones or achievements

Association for Computational Linguistics (ACL)

Recent

- Association for Computatio...
- CSIRO STEM Professionals i...
- ACS (Australian Computer S...
- ALTA (Australasian Language...
- BMIT Alumni (Official)

Groups

- Association for Computatio...
- CSIRO STEM Professionals i...
- ACS (Australian Computer S...

Events

Followed Hashtags

#nlproc

See all

Discover more

Martin Krallinger (He/Him) • 1st
Head of Natural Language Processing for Biomedical Information Analysis...

Dear all,

I am happy to share the release and accessibility of CARMEN-I at PhysioNet (which also hosts MIMIC-IV among other resources).

I hope you find this resource useful.

URL:
<https://lnkd.in/dy4Rn2aT>

The CARMEN-I corpus comprises 2,000 clinical records, encompassing discharge letters, referrals, and radiology reports from Hospital Clinic of Barcelona between March 2020 and March 2022. These reports, primarily in Spanish with some Catalan sections, cover COVID-19 patients with diverse comorbidities like kidney failure, cardiovascular diseases, malignancies, and immunosuppression. The corpus underwent thorough anonymization, validation, and expert annotation, replacing sensitive data with synthetic equivalents. A subset of the corpus features annotations of medical concepts by specialists, encompassing symptoms, diseases, procedures, medications, species, and humans (including family members). CARMEN-I serves as a valuable resource for training and assessing clinical NLP techniques and language models, aiding tasks like de-identification, concept detection, linguistic modifier extraction, document classification, and more. It also facilitates training researchers in clinical NLP and is a collaborative effort involving Barcelona Supercomputing Center's NLP&BIA team, Hospital Clinic, and Universitat de Barcelona's CLIC group.

CARMEN-I: A resource of anonymized electronic health records in Spanish and Catalan for training and testing NLP tools

Published: Nov. 3, 2022 · version 1.0

Sharing a resource which can be useful for others in the NLP community

Aditya Joshi (He/Him) • 1st
Lecturer/Assistant Professor, UNSW Sydney | Natural Language Processing

1mo •

"A child's first experience of reward is the parent's smile."

Bilingual children often learn their heritage language through parental feedback at home. With this inspiration, BAMBINO-LM, our continual pre-training algorithm, combines reinforcement learning with next-word prediction. We use BAMBINO-LM to adapt the English base model of the 2023 BabyLM challenge, and get it to learn Italian.

Small-scale language models such as BabyLM are a great way to demystify the performance of LLMs. This research was led by [Richard Shen](#) as a 'Taste of Research' project, in collaboration with the rockstar [Ruey-Cheng Chen](#).

Pre-print here: https://lnkd.in/g5_JiYJW

The diagram illustrates the architecture of BAMBINO-LM, which operates in an alternating run between two main phases: the Learning Phase and the Feedback Phase.

- Learning Phase (Pink Box):** Contains a box for 'CAUSAL LANGUAGE MODELING (CLM)'. It receives input from the 'TRAINING DATASET' (orange box) and outputs to 'BAMBINO-LM' (red circle).
- Feedback Phase (Green Box):** Contains three main components: 'PROXIMAL POLICY OPTIMIZATION (PPO)', 'REWARD COMPUTATION', and 'PROMPT CREATION'.
 - 'BAMBINO-LM' feeds into 'PROXIMAL POLICY OPTIMIZATION (PPO)'.
 - 'PROXIMAL POLICY OPTIMIZATION (PPO)' feeds into 'REWARD COMPUTATION'.
 - 'REWARD COMPUTATION' feeds into 'PROMPT CREATION'.
 - 'PROMPT CREATION' feeds back into 'CAUSAL LANGUAGE MODELING (CLM)' in the Learning Phase.
 - 'REWARD COMPUTATION' also receives input from a 'PARENT PROMPT' (red circle).

The entire process is labeled 'ALTERNATING RUN' at the top, indicating the cyclical nature of these phases.

Figure 1: Architecture of BAMBINO-LM.

An easy to follow explanation of an upcoming publication.



Gholamreza (Reza) Haffari • 1st

Director of Vision and Language (AI) Research, ARC Future Fellow

1mo •

...

A really nice work from Tong in our team on continual learning aspects of coding-LLMs! He considers the problem of version-controlled code generation, formulates the problem, setup the data and evaluation of some ...more



Tongtong Wu • 2nd

Research Fellow @ Monash University

1mo • Edited •

[Follow](#)

Happy to share our latest work on Software Engineering and LLMs' Continual Learning: ...more



git 1 This repository contains the version-controllable code generation (V2C) framework with the code generation, version control, and evaluation scripts, and the evaluation results. It is a public repository, and the version of the repository is 1.0.0.

VersiCode: Towards Version-controllable Code Generation

wutong8023.site



Sarvnaz Karimi · You

Researcher in Natural Language Pro...

3w · Edited · 🌐

Very proud of our PhD graduate Dr Vincent Nguyen ([Vincent Nguyen](#))! He started in our team as a summer intern/vacation scholar of [CSIRO's Data61](#) in 2016, then a PhD with [CSIRO](#) scholarship on Medical Question Answering, and now working alongside us as our colleague! Can't be more satisfying to see the journey of our graduates and their successes!

Executive Medical Question Answering
Challenges and Approaches

Vincent Thang Nguyen

A thesis submitted for the degree of
Doctor of Philosophy

by Vincent Thang Nguyen
BSc (Hons) in Computer Science

2021 College of Engineering and Computer Science



Page 101

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59

3 comments



Sarvnaz Karimi · You

Researcher in Natural Language Processing at CSIRO Data61

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For those interested in AI for Climate Adaptation, this symposium will be a great event to attend. It's happening in Melbourne in October 2024 and registration is open now! <https://wp.csiro.au/ai4c/> [#AI4Climate](#)



Dr Mahesh Prakash · 1st

Sector Lead, Senior Principal Research Scientist CSIRO's Data61, L...

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Over two days we at CSIRO will explore the multifaceted role of AI in adapting to and mitigating against climate change responsibly, through innovative talks and keynotes, unpacking industry ...more

AI for Climate Symposium

events.csiro.au

Not LinkedIn



- Personal updates that may be best kept private
- Engaging with unprofessional discussions
- Unprofessional comments about others
 - Attacking a (past) colleague or organisation
 - Gossips that may ruin your reputation later on

Here are photos of my kid
playing!

Universities at country X
are bad!



That professor at university Y is unethical
and fraud! Because I say so!

Can you go on a date with me? I like your
research!

Method X proposed by Y is not working on
my dataset! Therefore that researcher is a
fraud!



*ACL's Official Accounts

From 2019, all the social media accounts are streamlined:

@aclmeeting

@naaclmeeting

@aaclmeeting

@eacmeeting

@emnlpmeeting

+ ACL Group on Facebook and LinkedIn





*ACL's Hashtags

#NLProc : any generic NLP-related post

Conference-related:

#ACL<year>NLP

#AAACL<year>

#EACL<year>

#NAACL<year>

#EMNLP<year>



For future publicity chairs of *ACL conferences



Contact the ACL publicity director early on!

(ACL officers: https://www.aclweb.org/adminwiki/index.php/ACL_Officers)

- There is a handbook that collects past publicity chairs input
- Publicity chairs should be proactive and use new content to keep the information flowing
- If done right, it reduces some load off the conference co-chairs

ACL Announcement



- Contact the ACL publicity director to send emails to mailing lists (e.g., corpora, ML news)
 - **Email:** announcement@aclweb.org
- Organising a workshop/tutorial in *ACL conferences: This may be a good option

ACL Member Portal: Only goes to the ACL Members



Interviews

PhD positions, Internships and Postdoctoral Fellows





What are the interviews for?

- Interviewers want to know if your skills match their need
- It's mutual
 - you need to decide if the job and workplace matches your expectations
 - Ask questions & be curious

PhD positions

- Check for universities with an active NLP group
- Find supervisors that publish in the NLP venues (e.g., *ACL/EMNLP/COLING/LREC)
- Different continents and countries have their own procedure. Read the information before applying!
 - US
 - Europe
 - Australia
 - Asia
 - Africa

Internships

- Short-term jobs
- Gives you a flavour of what to expect after PhD
- Opportunity to work with those researchers you wish to learn from
- Can open more options after graduation
- May lead to one or more publications
- May lead to scholarships



Postdoctoral Fellow (postdoc) or Research Fellow

- Early career researchers
- Typically 2-3 years after PhD
 - Same as PhDs, postdoc positions are different in different continents
 - In Australia: Typically 3-years
- One project
- Aim is to get you ready for the next job (industry or academia)

Publish as much as you can!

Applying for jobs or PhD positions

- A current CV/Resume
- A cover letter to state why you wish to be considered for a given position
- Any relevant documents (if asked) such as university qualifications
- A list of references (check with them first, and ask permission)



So, you've been asked to do an interview

Congratulations! It's great to be shortlisted!

- Communicate immediately if there are date and times you are not available.
- Time to prepare!
 - Also known as “do your homework”!
 - Make sure you know the organisation: what they do and why
 - The interviewers background (if known in advance)
 - Some questions to ask about the job!



Interview day

- Be punctual!
- If you cannot make it, let them know as soon as possible (cancel or rearrange)
- Check in advance that the technology works (online)
- If you're to rely on technology for translation, let them know

Introduce yourself!

It is vital to get this right!

- Explain your PhD in an elevator pitch level
- Be ready to explain your papers, your contributions
- Say what you learnt in the previous position (skills)



1. PhD
2. Honours
3. Masters
4. Internship
5. ...

It's about me!



Listen to Understand

- Only way to be able to answer a question is by understanding it!
- No need to rush! Ask for clarification! Check your understanding if not sure!



How to answer questions during an interview



- Answer the questions directly and honestly
 - Facts only
 - Examples
 - Have you applied for a PhD admission yet? The answer is yes or no. You can also mention when, outcomes.
 - Do you have a paper published in an *ACL venue? Yes or no. “Thinking about writing” is not an acceptable answer.
- Again, ask for clarifications if unsure
 - It shows you care and you can have a conversation

What if I do not know the answer?

- “I don’t know” is a perfect answer!
- Interviewers would appreciate:
 - Honesty
 - Not having their time wasted with irrelevant fillers





What to avoid during an interview

- Unproductive criticism
 - Criticise the interviewer's research to show you're aware of their work
 - It's not a peer-review process!



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 - What is currently on-trend is not all that matters (respect past work)
 - SVMs can still be useful in some applications
 - LLMs are not the answer to all problems



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- Unproductive criticism
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- Too much reliance on trends
 - What is currently on-trend is not all that matters (respect past work)
 - SVMs can still be useful in some applications
 - LLMs are not the answer to all problems
- Unwanted slides and materials
 - If the panel is not asking for a presentation, do not insist on that
 - Reliance on prepared material can derail you from listening and answering the questions

Follow ups: More interviews

- Depending on the position, some interviews are followed by
 - Coding tasks
 - Talks to a larger audience
 - Requests for documents or providing evidence
 - References: This is different in different countries (e.g., in Australia usually only if a candidate makes it to a potential hire; in the US done before interviews)



Follow ups: Interview talk



- **Audience:** Ask in advance who will be in the audience
 - Are they all NLP experts? Will they know your area of expertise?
- **Time:** Ask about your allocated time and stick to it! That's respect to their time and schedule!
- **What to Present:** You may want to present a summary of multiple projects or your most prominent one.
 - Slides filled with equations and tables of results may not be as impressive as you may think.
- **They want to know:** are you able to communicate your research well?

Follow ups: Verbal or Written Outcome

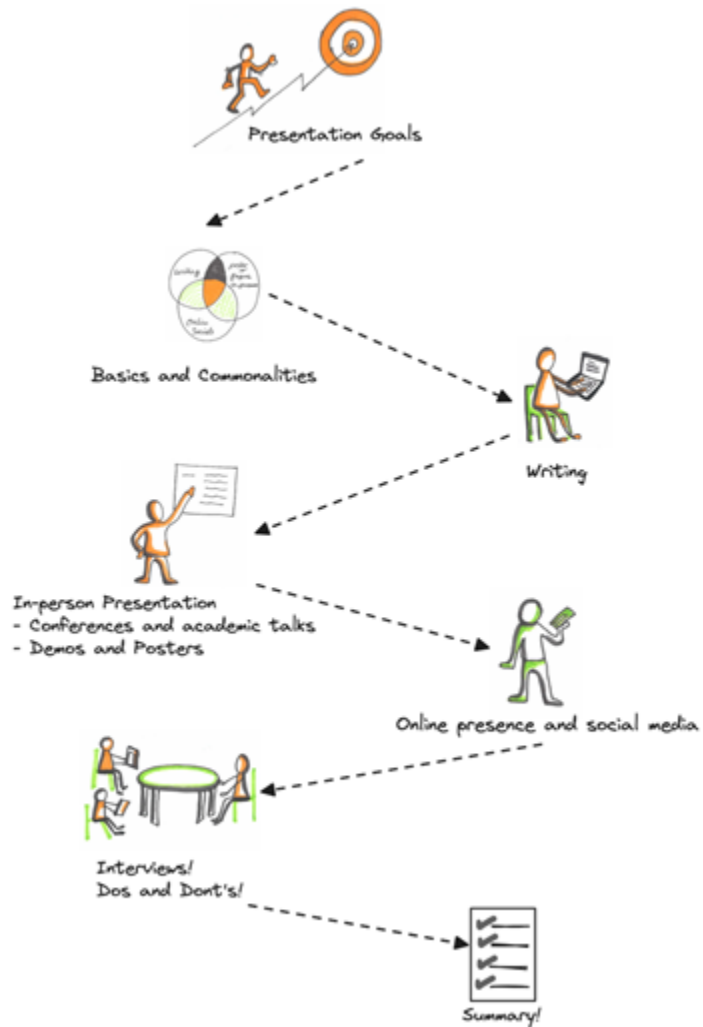
- **Negative:**
 - Keep it professional and polite! You may re-apply or meet them in a conference!
 - Learn from the feedback
- **Positive:**
 - Do acknowledge that you received it
 - Have an answer ready (accept or not) and when can you start



From your experiences of interviews.... Other tips?



Almost there!



Acknowledgements

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- Prof. Barbara Plank
- Prof. Wray Buntine
- Dr Simon Peyton Jones
- Dr Carolin Lawrence
- Zhijin Jin and others in the ACL Mentorship program

Summary

1. Know your audience!
2. Have a take home message, story and stick to it!
3. Prepare, prepare, prepare!



Resources

Writing Checklist

- ☐ Re-read the abstract and conclusions to ensure they match the story.
- ☐ Contributions are listed in the introductions.
- ☐ Check all the acronyms are expanded in their first mention in the text.
- ☐ All the tables and figures are referenced in the text.
- ☐ Spell-check and grammar check before submitting.

Presentation Checklist

- ☐ Slide numbers
- ☐ Meaningful final slide with maximum of three take home messages
- ☐ All the colours are visible
- ☐ Proofread
- ☐ Each slide has one message

Social media post Checklist

- ☐ Is this a meaningful content?
- ☐ Is it respectful?
- ☐ Is it professional? Will I be proud of it 5 years from now?
- ☐ Have I proofread properly?
- ☐ Is the media such as photos content mine to post (copyright)?

Interview Checklist

- ☐ Ready to explain my past research (PhD/Master/Honors) in 2-3 sentences
- ☐ Have read about the organisation and know what they do
- ☐ Ready to talk (meaningfully) about my publication(s) in details if they ask
- ☐ Checked all the equipment such as headset works (if online)
- ☐ Questions ready to check if this is the position for me

Resources

Presentations:

How to give a good talk on a Computational Linguistics topic (Barbara Plank) <https://naacl2018.wordpress.com/2018/05/27/how-to-give-a-good-talk-on-a-computational-linguistics-topic/>

<https://www.cs.jhu.edu/~jason/advice/how-to-give-a-talk.html> (Jason Einser)

<https://en.itu.dk/Research/PhD-Programme/PhD-Courses/PhD-courses-2021/PhD-Course---Communicating-State-of-the-art-NLP-Research-to-a-Broader-Audience>

Covey, S. R. (2004). The **7 habits of highly effective people (book)**

Resources

Writing:

Writing for Computer Science (Justin Zobel) - Book

Explaining explaining: a quick guide on explanatory writing (Lucas Costa) <https://lucasfcosta.com/2021/09/30/explaining-in-writing.html>

Tips for Writing NLP Papers (Vered Shwartz) <https://medium.com/@vered1986/tips-for-writing-nlp-papers-9c729a2f9e1f>

PhD applications:

PhDs in Europe: <https://soundcloud.com/nlp-highlights/134-phd-application-series-phds-in-europe-versus-the-us>

PhDs in the US: <https://soundcloud.com/nlp-highlights/133-phd-application-series-preparing-application-materials-with-nathan-schneider-and-roma-patel>

Resources

ACL Mentorship:

- ACL Mentorship YouTube videos: <https://www.youtube.com/watch?v=jFWF0PX4Pcs&list=PLqX2Wb03yR2Sg6eM4xHujbHlyqnvalufy>
- ACL mentorship home page: <https://mentorship.aclweb.org/>

Resources

<http://users.umiacs.umd.edu/~jbg/static/style.html>

<https://www.microsoft.com/en-us/research/academic-program/write-great-research-paper/>

<https://www.youtube.com/watch?v=TCytsY8pdsc>

<https://www.wiley.com/en-us/network/publishing/research-publishing/writing-and-conducting-research/how-to-write-a-scientific-abstract>

<https://www.youtube.com/watch?v=pbrxGnL3tvQ>

<https://aaai.org/aaai-conference/reproducibility-checklist/>

<https://www.youtube.com/watch?v=0h8woOdNSN4>

Resources

[Research is communication \(frankx.fz.me\)](https://frankx.fz.me) provides some good ideas for writing a good scientific paper.

[how-to-be-a-successful-phd-student.pdf \(frankx.fz.me\)](https://frankx.fz.me/how-to-be-a-successful-phd-student.pdf) has good suggestions about when to write.

For many NLP projects, it would be great to include one or two sentences summary in the introduction to highlight the key contributions of this work. The reviewers can easily reuse such sentences in peer reviews.

It would be great to understand the peer review process and mitigate some common pitfalls via good writing. [What Can We Do to Improve Peer Review in NLP? - ACL Anthology](#) and the recent white paper [2405.06563 \(arxiv.org\)](#) written by us.

Behavioral consequences of second-person pronouns in written communications between authors and reviewers of scientific papers <https://www.nature.com/articles/s41467-023-44515-1>