

How to present your research?

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Research presentation

The purpose of this research is
to convey "**conclusion**" to the audience
within the time limit.

研究発表の目的は、「結論」を制限時間内に聴衆に伝えることである。

Conclusion

"Conclusion" should NOT be a list of random trials, but rather information that has been given significance and carefully examined to provide useful knowledge to the audience.

結論は、結果の羅列ではなく、結果を意味づけ・吟味した情報で、
聴衆に対して有用な知識となる。

✗ : Simply stating "I did this, I did that, but I didn't understand anything" does not constitute a presentation worth giving.

! : When the results can be interpreted in various ways, the main argument should be decided in the discussion section and that should form the conclusion.

To convey the audience, **logical story** is preferred.

Do not assume that the assumptions and presuppositions in your own mind are understood by everyone. Show **a clear hypothesis in advance**.

明確な仮説をあらかじめ示せ.

× : A method is better than B. (Why?, What is your definition of A, and B? What is the criterion of "better"? And how much the improvement is?)

Logical story

Implicit template of a logical presentation

(background → objective → methods → results →
discussion → conclusion)

聴衆はそれをある程度期待している.

× : Your thoughts with no explanation of the background, specialized terms and abbreviations

Logical story

**The success of the presentation is determined
in the first few minutes.**

発表の出来は，最初の数分で決まる。

To convey the audience, **logical story** is preferred.

The audience wants to know **what the presenter has done**, rather than the detailed background.

聴衆は、詳細な背景ではなく、発表者が何をやったかを早く知りたい。

To convey the audience, **logical story** is preferred.

Introduce the purpose of the research as early as possible to convey the overall picture of the research to the audience as quickly as possible.

研究の全体像をできるだけ早く聴衆に伝えるために、
研究の目的をできるだけ早く登場させる。

Logical story

The purpose of the research is, in effect, the conclusion. **The objective and the conclusion should correspond one-to-one.**

研究の目的は、事実上の結論である。目的と結論は、一対一に対応させる。

Logical story

Consider an order that is **easy to understand for someone hearing it for the first time**, from the overall picture to the details.

初めて聞く人が、理解しやすい順序を考える.

! : Provide a clear and appealing background and a climactic discussion.

Logical story

Explaining experiments in the order they were conducted is nonsense.

研究発表は、小説でもエッセイでもない。

× : Do not hold back important results.

Presentation Golden Rules

Do not use data that might confuse the audience. It's the presenter's prerogative to select what to share. Use it wisely.

聴衆を混乱させるおそれがあるデータは使わない.

Presentation Golden Rules

Audience May Not Always Be Focused:

Always include crucial information on the slides
because the audience might not catch
everything said aloud.

聴衆は、発表者の話に集中しているとは限らない.

Presentation Golden Rules

Don't Present Information Not Covered: It distracts and potentially confuses the audience.

発表中に触れない情報は提示するな.聴衆の注意が削られる.

Presentation Golden Rules

Don't Rush Through to Fit Time Limit:
the audience won't understand.
Instead, reduce the number of slides.

制限時間内に収まらないからといって、早口で話すことは邪道である。

！： It's essential to convey the core conclusions efficiently, even with less information.
However, prepare extra slides for the Q&A session.

Presentation Golden Rules

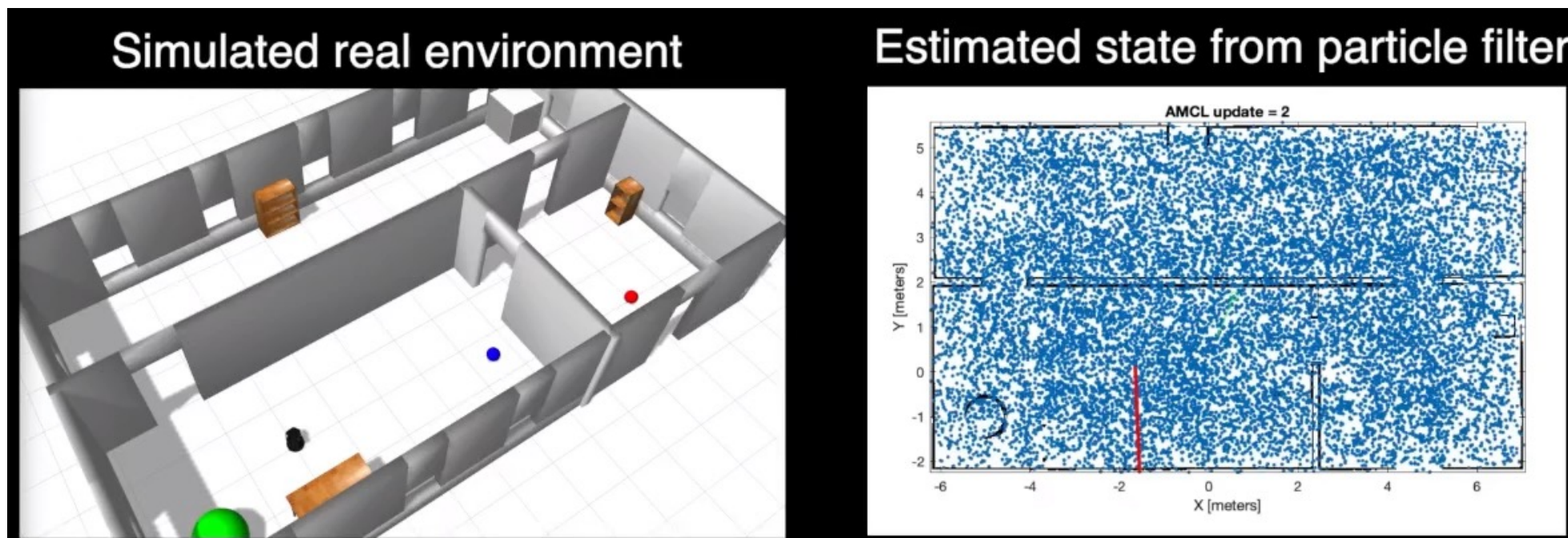
Use images to explain concepts as much as possible. Slides full of text are less engaging.

字だけのスライドだと、聴衆が見る気を失う。

Presentation Golden Rules

Impactful Videos/Animations: Videos or animations with impact are persuasive and highly effective.

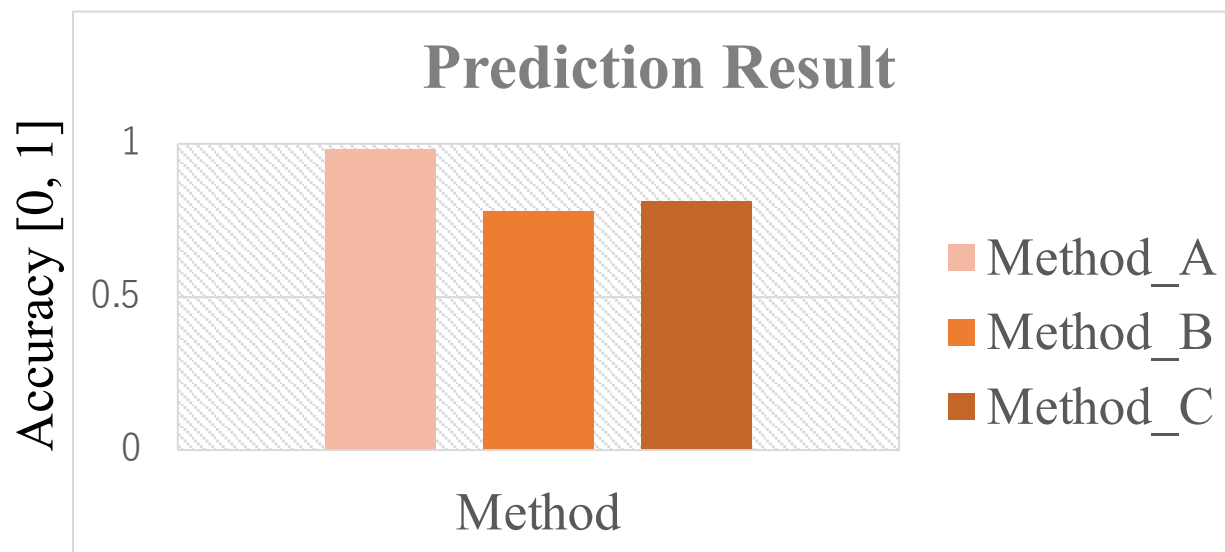
インパクトのある動画・ビデオは説得力があり，効果絶大である．



Presentation Golden Rules

Always include titles for charts/figures and labels for the axes, including units.

図表のタイトル，グラフの横軸・縦軸のラベルと単位は絶対に省くな。
常識を疑われる。



Presentation Golden Rules

Font Size: Use a minimum of 20 points for text, including graph labels and units.

文字は，原則として，20 ポイント以上. グラフのラベルや単位も例外ではない.

- ！： Use slide master for consistency,
- ✗： Font size less than 14 points, should not be used.

Presentation Golden Rules

Text to 8 Lines per Slide: More than this and the slide becomes difficult to quickly comprehend.

文字は 8 行まで.聴衆がぱっと見て, その概要を把握できなくなる.



[CITS] Cool4-3 Intersection Rerouting with CP Risk Assessment using V2X

Objective: To optimize RSU setup, including their number and angles, as well as the types of sensors used for safer autonomous driving and more efficient traffic management in a V2X environment, specifically within an Autware + CARLA / AWSIM

Procedure:

Risk Assessment and Evaluation リスクモデリング

- Risk Modeling
- Simulation and Scenario Analysis
- Algorithms

Planning and Re-routing

- Dynamic Planning and Re-routing
- Fail-safes
- Communication Protocols

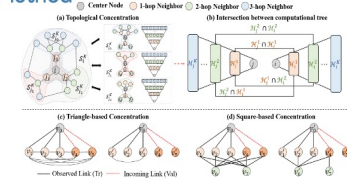
Monitoring and Feedback Loop フィードバック監視

- Continuous Real-time Monitoring
- Feedback Loop

Cooperative ITS equipment



Method



A Topological Perspective on Demystifying GNN-based Link Prediction Performance
Yu Wang, Tong Zhao, Yinying Zhao, Yunchao Liu, Xueqi Cheng, Neil Shah, and Tyler Derr,
International Conference on Learning Representations (ICLR), 2024.

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IROSS2024

Topic: Embedding Personalized Lane Change Behaviors with Graph Neural Networks

Result:

In our experiment, we selected Spectral Clustering, DeepWalk, and GraphSAGE-GCN as benchmarks to compare with our proposed method. To clearly understand the effectiveness of each approach, we visualized the embedding results produced by these methods. The visualization reveals that the embeddings generated by our proposed method align more accurately with the true labels of the data, indicating a superior performance in capturing the underlying patterns.

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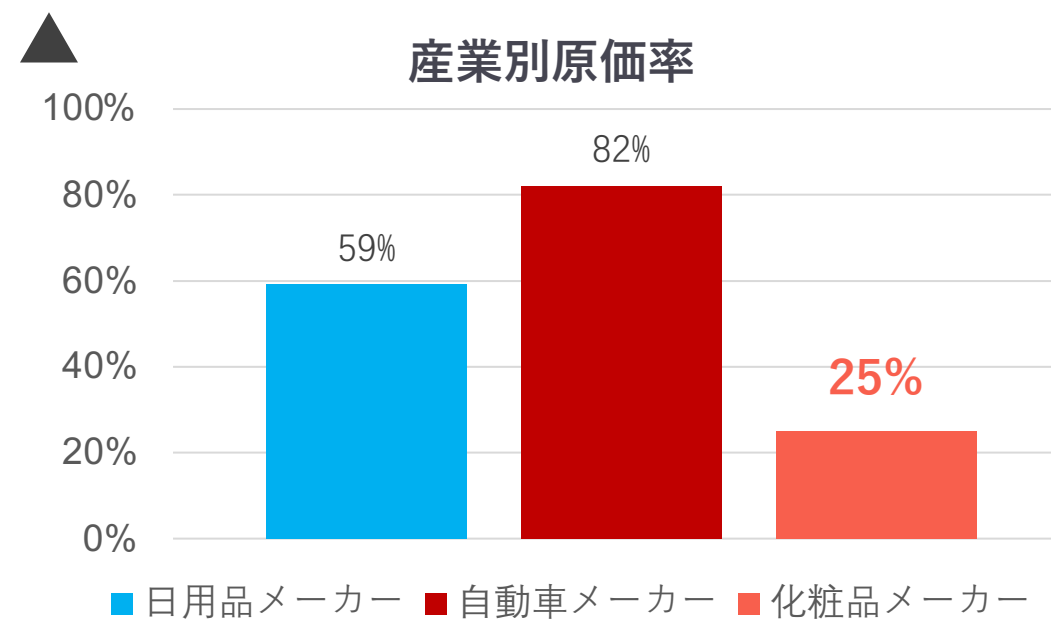
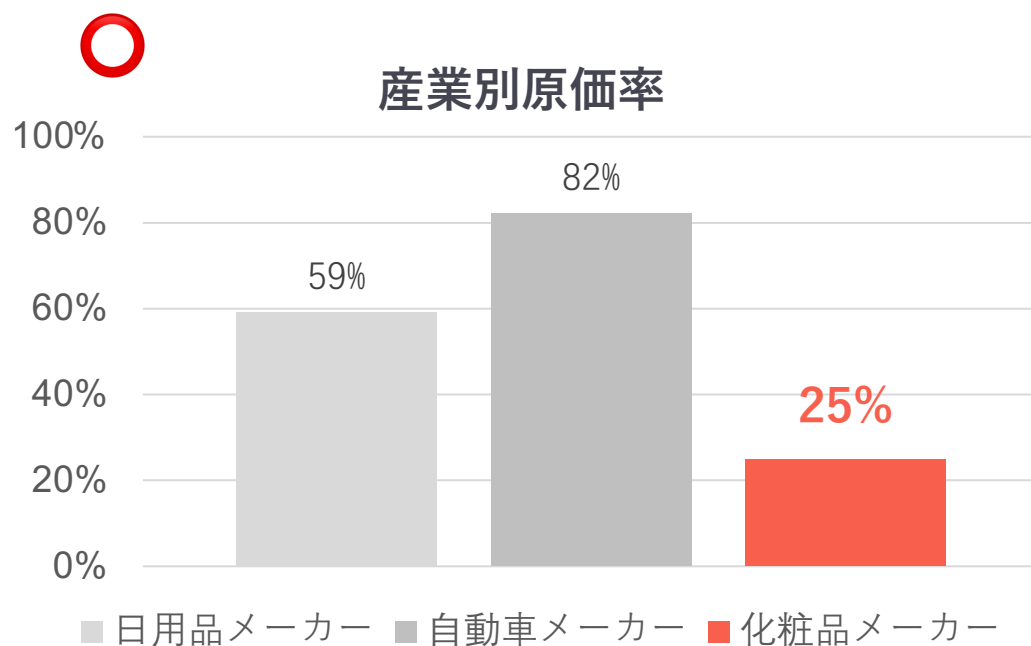
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Presentation Golden Rules

Use colors effectively to highlight or distinguish information.

色を効果的に使え.



Q&A Session Golden Rules

Questioners Are Not Enemies: Treat questioners with respect during the Q&A session. Responding with hostility can lead to more aggressive questioning.

質問者は敵ではない。

Good Response: "What you say is very valid. However, I have a slightly different perspective."

Poor Response: "I think your approach is wrong." (Never outright negate the questioner.)

Q&A Session Golden Rules

Start Answers with the Conclusion: Especially for questions that offer a binary choice, clearly state "YES" or "NO" before explaining further. This ensures that the most crucial information is not omitted.

質問に対する回答でも、最初に結論を述べる。

Q&A Session Golden Rules

Stay Positive in Q&A Sessions

前向きに答える.

If faced with a critical question, respond optimistically, e.g., "That's a great question. It will be considered in future work. Thank you for the constructive suggestion." Always maintain a forward-looking and positive attitude.

Reference Outline of Logical Presentation

Page No.	Outline	Content
0	Cover Page	Add the title, name, presentation date, organization.
1	Introduction	Explain the motivation, background to logically lead to the objective.
2	Background	If the background explanation is too long, the audience will become bored.
3	Purpose/Objectives	The objective is, in effect, the conclusion.
4~5	Related Works	Explain why your work has novelty. Show the benchmarks.
5~6	Overview of Research/system	Present the overall picture at an early stage.
7	Proposed method/Framework	Overview of Experimental Methods (or Design Specifications)
8	Detailed Description of Experimental Methods	Declare specifically what will be done in the methods section, allowing the audience to understand the overall content of what will be discussed.
9	Evaluation Methods/Metrics	Explain the metrics to show the quantitative result.
10~13	Experimental results	<p>tart with raw data that allows the audience to visualize the overall picture. Do not narrate in chronological order.</p> <p>Bad: "We did this. It didn't work, so we tried this next. It got a bit better, so then we did this."</p> <p>Good: "When we did it this way, it worked well. For reference, when we tried this and this, it didn't work because of these reasons."</p>
14~15	Observation	<p>Discussion: Transform experimental results into knowledge. Compare with previous studies to articulate how understanding has increased.</p> <p>Before Knowledge Transformation: Help the audience organize the results. Using tables can be helpful. Do not focus too much on details.</p>
16	Conclusion	The conclusion is the essence of the presentation. It should correspond to the objective. The difference between the conclusion and the objective lies in its specificity and quantifiability.

Reference

[研究発表の心得](https://www.ne.t.u-tokyo.ac.jp/archive/presentation.pdf)

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