SMU Presentation Template
Subtitle

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Table of Contents

Title

To use this template, just edit and add slides!

There are 3 color themes prepared for you under **Headline and Central Footer** section. Check the color design of your school when customizing the theme:

https://www.smu.edu.sg/about/university-brand-identity

The remainder of these slides serves as an example of the features you can use: footnotes, citations, columns, mini pages, bullets, links, code, maths, etc.

Enjoy!

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Intra-frame Footnotes and Citations I

Citation in Beamer works slightly differently from conventional cites as Beamer rewrites its footnote and citation functions. A common issue is the duplication of footnotes in a frame when using `footcite`.

This paper[1], that paper[2], and another paper[3].

And this paper[4], that paper[5], and another paper[6] again.

---

[1] 1, "Foundations of the PARAFAC procedure: Models and conditions for an" explanatory" multimodal factor analysis", 1970.

[2] 2, "The Expression of a Tensor or a Polyadic as a Sum of Products", 1927.

[3] 3, "Analysis of individual differences in multidimensional scaling via an n-way generalization of "Eckart-Young" decomposition", 1970.

[4] 1, "Foundations of the PARAFAC procedure: Models and conditions for an" explanatory" multimodal factor analysis", 1970.

[5] 2, "The Expression of a Tensor or a Polyadic as a Sum of Products", 1927.

[6] 3, "Analysis of individual differences in multidimensional scaling via an n-way generalization of "Eckart-Young" decomposition", 1970.

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Inter-frame Footnotes and Citations I

Another issue with `footcite` is the unwanted continuation of the footnote index.

This paper[7], that paper[8], and another paper[9].

And this paper[10], that paper[11], and another paper[12] again.

---

[7] 1, "Foundations of the PARAFAC procedure: Models and conditions for an" explanatory" multimodal factor analysis", 1970.

[8] 2, "The Expression of a Tensor or a Polyadic as a Sum of Products", 1927.

[9] 3, "Analysis of individual differences in multidimensional scaling via an n-way generalization of "Eckart-Young" decomposition", 1970.

[10] 1, "Foundations of the PARAFAC procedure: Models and conditions for an" explanatory" multimodal factor analysis", 1970.

[11] 2, "The Expression of a Tensor or a Polyadic as a Sum of Products", 1927.

[12] 3, "Analysis of individual differences in multidimensional scaling via an n-way generalization of "Eckart-Young" decomposition", 1970.

Intra-frame Footnotes and Citations II

This template provides a workaround for these issues. Let's use the customized command `firstcite` when citing a reference in a frame for the first time, and `secondcite` for the following citations.

This paper[1], that paper[2], and another paper[3].

And this paper[1], that paper[2], and another paper[3] again.

---

[1] Harshman et al., "Foundations of the PARAFAC procedure: Models and conditions for an" explanatory" multimodal factor analysis", 1970.

[2] Hitchcock, "The Expression of a Tensor or a Polyadic as a Sum of Products", 1927.

[3] Carroll and Chang, "Analysis of individual differences in multidimensional scaling via an n-way generalization of "Eckart-Young" decomposition", 1970.

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Inter-frame Footnotes and Citations II

This workaround works for the inter-frame scenario as well.

This paper[1], that paper[2], and another paper[3].

And this paper[1], that paper[2], and another paper[3] again.

---

[1] Harshman et al., "Foundations of the PARAFAC procedure: Models and conditions for an" explanatory" multimodal factor analysis", 1970.
[2] Hitchcock, "The Expression of a Tensor or a Polyadic as a Sum of Products", 1927.
[3] Carroll and Chang, "Analysis of individual differences in multidimensional scaling via an n-way generalization of "Eckart-Young" decomposition", 1970.

Columns
And Graphics

Check this slide to see how columns made the formatting look nice.

Bullets

You can use bullets too:

- Like this one

- & this one

Sub-bullets and Links

- You can also nest sub-bullets
  - Sub-bullet 1
  - Sub-bullet 2
  - Sub-bullet 3
  - Sub-bullet 4

Below is a button that links to a slide in the appendix

▸ Go to graphs

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Code and Mathematics

Here is a made-up equation:

$$\hat{A} = \bar{m} - \hat{m}_S$$

Notice how these buttons are centered and evenly spread out:

▸ Go to terms   ▸ Go to code   ▸ Go to theorems

Numbered Bullets

1 Instead of bullets, you can index by number too

2 Like this!

Blocks

Block Title
Block 1

Example Block Title
Block 2

Alert Block Title
Block 3

Block without a title

Conclusion

This is the last numbered slide in the Table of Contents.

Clicking the central bottom link will switch between the title and this slide.

Questions?

References I

[1] Richard A Harshman et al. "Foundations of the PARAFAC procedure: Models and conditions for an" explanatory" multimodal factor analysis". In: *UCLA Working Papers in Phonetics* 16 (1970), pp. 1–84. ISSN: 00360236. DOI: `10.1134/S0036023613040165`.

[2] Frank L. Hitchcock. "The Expression of a Tensor or a Polyadic as a Sum of Products". In: *Journal of Mathematics and Physics* 6.1-4 (1927), pp. 164–189. ISSN: 0097-1421. DOI: `10.1002/sapm192761164`.

[3] J Douglas Carroll and Jih-Jie Chang. "Analysis of individual differences in multidimensional scaling via an n-way generalization of "Eckart-Young" decomposition". In: *Psychometrika* 35.3 (1970), pp. 283–319. ISSN: 00333123. DOI: `10.1007/BF02310791`.

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Appendix - A figure

Appendix - Terms
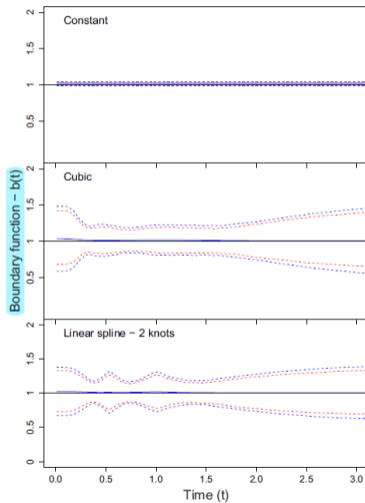
Some Estimators:

- Drift: $\hat{\delta}$
- Boundary: $\hat{b}(t)$

Some Variables:

- $\hat{V}$
- $\hat{m}_S$
- $\bar{m}$
- $m_J(\tau)$

◂ Return to presentation

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Appendix - Code Blocks

```
1  \begin{itemize}
2  \item A \item B
3  \item C
4  \begin{itemize}
5      \item C-1
6  \end{itemize}
7  \end{itemize}
```

- A
- B
- C
    - C-1

```
1  \begin{enumerate}
2  \item A \item B
3  \item C
4  \end{enumerate}
```

```
1  \begin{enumerate}
2  \item A \item B
3  \item C
4  \end{enumerate}
```

◄ Return to presentation

1. A single-line equation

$$J(\theta) = \mathbb{E}_{\pi_\theta}[G_t] = \sum_{s \in \mathcal{S}} d^\pi(s) V^\pi(s) = \sum_{s \in \mathcal{S}} d^\pi(s) \sum_{a \in \mathcal{A}} \pi_\theta(a|s) Q^\pi(s, a)$$

2. A multi-line equation with numbering

$$Q_{\text{target}} = r + \gamma Q^\pi(s', \pi_\theta(s') + \epsilon) \tag{1}$$
$$\epsilon \sim \text{clip}(\mathcal{N}(0, \sigma), -c, c)$$

◂ Return to presentation

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