Rensselaer
why not change the world?®

(Unofficial)
RPI Beamer Presentation Template
And an optional subtitle

Presentation Overview

1 Introduction

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1. Introduction
2. Table of Contents
3. List/Figure/Table
   - Lists
   - Figures
   - Figures in Full Screen
   - Tables
   - Textboxes

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4 Equation/Theorem/Definition/Algorithms
- Equations
- Definitions

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5. Using Bibtex

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5. Using Bibtex
6. Advanced Controls
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Outline

What is this?

A template for beamer presentations. I made this template following RPI's official powerpoint template and logos [1].

Why did I do this?

I couldn't find an existing one and I didn't want to copy over citations manually.

Before We Start

- This project uses the `fontspec` package, which is not supported by the default compiler backend on Overleaf.
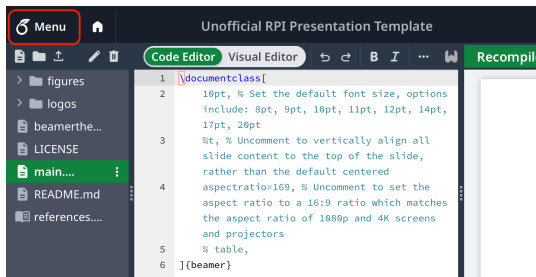- You can change this by following the two steps:
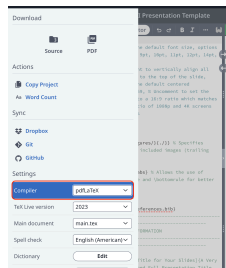

Figure: Open the menu tab

Figure: Set compiler to XeLaTex

Style Notes

- Use of `minipage` is encouraged.
  - Why? because I designed the template with it in mind. The columns env probably works for the most part as well, but it might not.
- I tried to use relative values for margins and header/sizes where I could. It should scale well with different page sizes.
- Just use
  `ref` for references. it's pretty annoying to get cleveref to work with beamer [2], and it doesn't look like there will be a nice way any time soon **<empty citation>**

Outline

Table of Contents

- You already saw the table of contents.
- By default, it is in one column. If you want to divide it to multiple columns, you can use minipage or columns [3]
- To make use of this, you need to use sections, which should be placed outside of the frame [4].
- Use `AtBeginSection` to automatically show the table of contents at the beginning of each section.

Outline

Outline

Using lists

Simple example of using lists.

- Item 1.
- Item 2.

1. Enumerate 1
2. Enumerate 2

I think this looks pretty similar to how the powerpoint one looks.

Outline

Using figures

Here is an example of a figure.
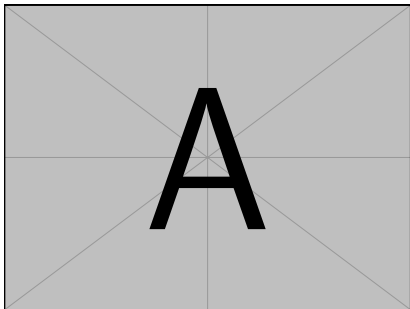
Figure: A subfigure
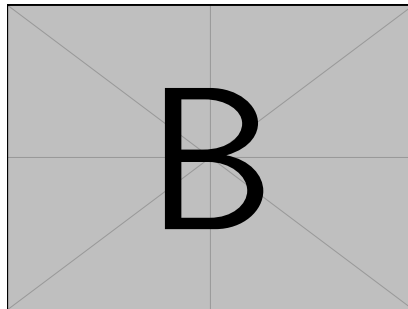
Figure: Another subfigure

Figure: Example of a figure side by side.

Outline

Using a full screen image

Next slide shows how to use an image in full screen. I got this from [here]

A

Outline

A Table

Col 1	Col 2	Col 3
a	b	c
d	e	f

Table: An example table

Findings

- This is indeed a table.
- Use minipage to put two things side by side, just like the images.
- You can also use columns, but it's not necessary [5].

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Textboxes

First Block

- First item of first block.
- Second item of first block.
- Notice that the next block matches the height of this one.
- I am also changing the indentation of bullets so it looks better in the boxes.

Second Block

- First item of second block.
  - first sub item of second block.

Third Block

This one doesn't have a list and doesn't match the height!

Outline

Outline

Equations

$$\mathcal{L}_{\mathsf{CE}} = \sum_{c=1}^{C} \log \frac{\exp(x_{n,c})}{\sum_{i=1}^{C} \exp(x_{n,i})} \tag{1}$$

- Equation 1 shows the cross-entropy loss.
- You can also use inline equations like this: $x_{n,c}$.

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Definitions

> **Definition**
>
> This is a definition.
>
> - It can be used to define something.
> - It can also be used to define something else.
> - If you don't like the colors, you can change `block title` and `block body` of `setbeamercolor` in the `.sty` file.

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Using Bibtex

- It should be the same as using your regular bibtex.
- To showcase, let's cite some resources [6]–[8] that helped me put this together.
- You can add `[allowframebreaks]` to the frame to automatically continue the reference list in the text page if you have too many.
- You can use `\tcite` (short for textcite) shorthand to use it in *text* mode, i.e. Anglim [6].
- You can use `\fcite` (short for footcite) to add a citation with a footnote on the bottom of the slide.
  - Note that if you are using `\columns` or `\minipage`, the footnote will by default appear in the bottom of the *environment*, not the slide.
  - You can manually escape this by using just `\cite` or `\tcite` in text and adding a `\bfcite` (blank footcite) outside of these environments.
  - e.g. `\bfcite{fiandrinoAnswerDesignCustom2013}`.

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[7] C. Fiandrino, "Answer to "Design a custom Beamer theme from scratch"," (Nov. 2013), [Online]. Available: https://tex.stackexchange.com/a/146682

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Footer Title Option/Override

- The default behavior is to use the shorttitle (the stuff defined in [] after `\title`)
- You can change this by specifying an option when importing the template (like `\usetheme[<OPTION_HERE>]{rpi}`). Valid options are:
  - `footertitlemode=onlysection`
  - `footertitlemode=sectionandsubsection`
  - `footertitlemode=onlysubsection`
- OR you can override it by using `\overridefootertitle{<YOUR_TITLE_HERE>}`. This will override the title for the rest of the presentation, until you call `\clearoverridefootertitle`.

Another slide with custom footer title

Placeholder slide to show resetting the footer title

References I

[1] RPI, "Home | Strategic Communications and External Relations," (), [Online]. Available: https://scer.rpi.edu/.

[2] A.-M. Aldaoudeyeh, "Hyperlinks do not work with cleveref + beamer," (2019), [Online]. Available: https://tex.stackexchange.com/q/481022.

[3] samcarter_is_at_topanswers.xyz, "Answer to "Beamer: Vertical alignment of multi-column ToC"," (Oct. 2013), [Online]. Available: https://tex.stackexchange.com/a/136082.

[4] campa, "Answer to "Atbeginsection returns missing number treated as zero"," (Sep. 2022), [Online]. Available: https://tex.stackexchange.com/a/657724.

[5] M. Scharrer, "Answer to "Minipage, columns, tabular: Differences in applicability?"" (Nov. 2011), [Online]. Available: https://tex.stackexchange.com/a/34037.

[6] J. Anglim, "Answer to "Image on full slide in beamer package"," (Oct. 2010), [Online]. Available: https://tex.stackexchange.com/a/3927.

[7] C. Fiandrino, "Answer to "Design a custom Beamer theme from scratch","" (Nov. 2013), [Online]. Available: `https://tex.stackexchange.com/a/146682`.

[8] J. Kormylo, "Answer to "Make tikz nodes flush with slide edges in beamer title slide","" (Oct. 2017), [Online]. Available: `https://tex.stackexchange.com/a/395544`.