

# Zero-Shot Learning of Image Classification through Text-to-Image Generative Model

Advanced Machine Learning(AIR 6002)

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- **▶** Introduction
- ▶ Personalization
- ▶ Summary
- ► Reference



- A typical slide has bulleted lists
- These can be uncovered in sequence

#### Code for a Page with an Itemised List

```
\begin{frame}{Writing a Simple Slide}
  \framesubtitle{It's really easy!}
  \begin{itemize}[<+->]
   \item A typical slide has bulleted lists
   \item These can be uncovered in sequence
  \end{itemize}\end{frame}
```



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- You can select the white or maincolor slide style in the preamble with \themecolor{white} (default) or \themecolor{main}
  - You should not change these within the document: Beamer does not like it
  - If you really must, you may have to add \usebeamercolor[fg] {normal text} in the slide
- You can change the **footline colour** with \footlinecolor{color}
  - Place the command before a new frame
  - There are four "official" colors: maincolor, sintefyellow, sintefgreen,
    - sintefdarkgreen
  - Default is no footline; you can restore it with \footlinecolor{}
  - Others may work, but no guarantees!
  - Should not be used with the maincolor theme!



#### **Standard Blocks**

These have a color coordinated with the footline (and grey in the blue theme)

\begin{block}{title}
content...
\end{block}

#### **Colour Blocks**

Similar to the ones on the left, but you pick the colour. Text will be white by default, but you may set it with an optional argument.

\begin{colorblock}[black]{sinteflightgreen}{title}
content...
\end{colorblock}

The "official" colours of colour blocks are: sinteflilla, maincolor, sintefdarkgreen, and sintefyellow.



- You can use colours with the \textcolor{<color name>}{text} command
- The colours are defined in the sintefcolor package:
  - Primary colours: maincolor and its sidekick sintefgrey
  - Three shades of green: sinteflightgreen, sintefgreen, sintefdarkgreen
  - Additional colours: sintefyellow, sintefred, sinteflilla
    - o These may be shaded—see the sintefcolor documentation or the SINTEF profile manual
- Do not abuse colours: \emph{} is usually enough
- Use \alert{} to bring the focus somewhere



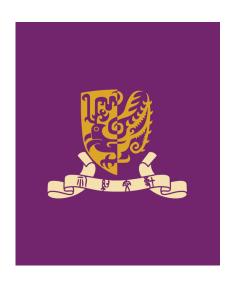
- You can use colours with the \textcolor{<color name>}{text} command
- The colours are defined in the sintefcolor package:
  - Primary colours: maincolor and its sidekick sintefgrey
  - Three shades of green: sinteflightgreen, sintefgreen, sintefdarkgreen
  - Additional colours: sintefyellow, sintefred, sinteflilla
    - o These may be shaded—see the sintefcolor documentation or the SINTEF profile manual
- Do not abuse colours: \emph{} is usually enough
- Use \alert{} to bring the focus somewhere
- If you highlight too much, you don't highlight at all!



#### Adding images works like in normal LTFX:

### **Code for Adding Images**

```
\usepackage{graphicx}
% ...
\includegraphics[width=\textwidth]
{assets/logo_RGB}
```





Splitting the page is easy and common; typically, one side has a picture and the other text:

This is the first column And this the second

#### **Column Code**



## **Special Slides**

2 Personalization

- Chapter slides
- Side-picture slides



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- Similar to frames, but with a few more options
- Opened with \begin{chapter}[<image>]{<color>}{<title>}
- Image is optional, colour and title are mandatory
- There are seven "official" colours: maincolor, sintefdarkgreen, sintefgreen,
  - sinteflightgreen, sintefred, sintefyellow, sinteflilla.
  - Strangely enough, these are more than the official colours for the footline.
  - It may still be a nice touch to change the footline of following slides to the same color of a chapter slide. Your choice.
- Otherwise, chapter behaves just like frame.



- Opened with \begin{sidepic}{<image>}{<title>}
- Otherwise, sidepic works just like frame





- The paramount task of fonts is being readable
- There are good ones...
  - Use serif fonts only with high-definition projectors
  - Use sans-serif fonts otherwise (or if you simply prefer them)
- ... and not so good ones:
  - Never use monospace for normal text
  - Gothic, calligraphic or weird fonts should always be avoided



- To insert a final slide with the title and final thanks, use \backmatter.
  - The title also appears in footlines along with the author name, you can change this text with \footlinepayoff
  - You can remove the title from the final slide with \backmatter[notitle]
- The aspect ratio defaults to 16:9, and you should not change it to 4:3 for old projectors as it is inherently impossible to perfectly convert a 16:9 presentation to 4:3 one; spacings will break
  - The aspectratio argument to the beamer class is overridden by the SINTEF theme
  - If you really know what you are doing, check the package code and look for the geometry class.



• you can cite your reference use  $\cite{}$ , e.g. [?]. The Reference will be shown in the last page.



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- Enough for an introduction! You should know enough by now
- If you have corrections or suggestions, send them to me!



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# Zero-Shot Learning of Image Classification through Text-to-Image Generative Model

Thank you for listening!
Any questions?