

Seminar Template

When Using L^AT_EXSlides

Philippe Dreuw, Thomas Deselaers

`{deselaers,dreuw}@informatik.rwth-aachen.de`

Seminar [TITLE] Slides with LaTeX

this occasion title can be very long – 32. Mai 2006

Human Language Technology and Pattern Recognition

Lehrstuhl für Informatik VI

Computer Science Department

RWTH Aachen University, Germany

Outline

1. Including Images

Hyperlinks and Running External Applications

▶ Audio

▶ Video

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Colors


Page Numbering

Changing Logos

2. Converting And Printing

PS: the outline should not have more than 5-7 items without any subitems

Literature

- ▶ Talks presented at the  should always have a literature part in front of the talk. Just copy bibitems from your *.bb1 files into a minipage and an \itemize environment.
- ▶ Depending on the public where you will present your talk you should adapt your literature slide.
- ▶ if you can cite each literature entry during your talk you could also put the bibliography here instead of copying each bibitem by hand

Starner & Weaver⁺ 98 a T. Starner, J. Weaver, A. Pentland (*MIT*): Real-time american sign-language recognition using desk and wearable computer based video. *PAMI*, Vol. 20, No. 12, pp. 1371–1375, December 1998.

Gavrila 99 b D.M. Gavrila (*Daimler-Benz Research*): The visual analysis of human movement: A survey. *CVIU*, Vol. 73, No. 1, pp. 82–98, February 1999.

Moeslund & Granum 01 c T.B. Moeslund, E. Granum (*Aalborg University*) A survey of computer vision-based human motion capture. *CVIU*, Vol. 81, No. 3, pp. 231–268, 2001.

Bobick & Davis 01 d A.F. Bobick, J.W. Davis (*Georgia Tech*): The recognition of human movement using temporal templates. *PAMI*, Vol. 23, No. 3, pp. 257–267, March 2001.

Bowden & Windridge⁺ 04 e R. Bowden, D. Windridge⁺ (*Surrey University*): A linguistic feature vector for the visual interpretation of sign language. *ECCV*, Vol. 1, pp. 391–401, Prague, CZ, May 2004.

Introduction

This latex beamer style was created by Philippe Dreuw and Thomas Deselaers and should be used for talks presented at the Lehrstuhl fuer Informatik VI at the RWTH Aachen University.

Any requests or comments should be sent to

► <mailto:{deselaers,dreuw}@informatik.rwth-aachen.de>

► <http://www-i6.informatik.rwth-aachen.de/>

Including Images

You can include your images with the `\includegraphics[options]{<filename>}` command. A short caption may be written with the `\caption{<name>}` command. Examples:



Car



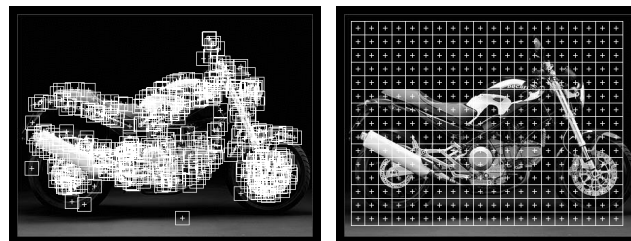
Airplane



Motorbike

Images With Caption below

Images can be scaled relatively to the `\textwidth` of the slides:



You should always provide images in JPEG– **and** EPS–format.



Including Images

- ▶ if you want to change the image paths, you should redefine the `\graphicspath` option and the paths using:

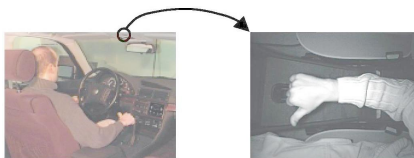
```
\renewcommand{\imagedir}{./images/}  
\renewcommand{\imagedir}{/u/figures/}  
\renewcommand{\xfigdir}{./xfigures/}  
\renewcommand{\logodir}{./logos/}  
\renewcommand{\audiodir}{./audio/}  
\renewcommand{\videodir}{./video/}  
\renewcommand{\sourcedir}{./sources/}
```

- ▶ `<filename>` means the path to the file (with or without parent folder depending on the `\graphicspath` option **without the file extension** (e.g. `*.pdf_t`, `*.jpg`, or `*.eps`).



Running External Applications

- ▶ You can call every external application with `\href{run:<script>}` command. For this you have to specify a shell script, in which you can execute any system commands. This will work with Xpdf  and AdobeAcrobat .
- ▶ **Shell demo starting xclock** will open a new terminal which will start the `xclock` on your computer.
- ▶ Also you can use this command to play movies. Clicking on the image will

play a movie





Hyperlinks

- ▶ You can link to an url with the `\url{<link>}` command, e.g. www.google.com. If you have a long url name or you want to change the name of the url anchor then use `\href{<link>}{<name>}`, e.g. [Google](#).
- ▶ use the `\urllogo{<link>}` or `\urllogobox{<link>}` to create links with an additional icon before like  www.google.com or  www.google.com
- ▶ With the `\hyperlink{<anchor>}{<linkname>}` and `\hypertarget{<anchor>}{<targetname>}` commands you can create links inside your slides. Example: this can be usefull to [link to slides from the appendix](#) (e.g. the data used to create a plot).
- ▶ Use the `\autoref{<anchor>}` command to automatically refer to ??, ??, or ??.

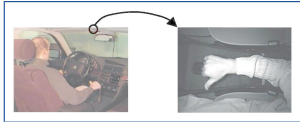




Playing Audio Files

Audio examples from the Verbmobil corpus:

- ▶ `\audiofilelogobox{<script>}`:  `example-verbmobil-1.wav`
- ▶ `\audiofilelogo{<script>}`:  `example-verbmobil-3.wav`
- ▶ `\audiofilebox{<script>}`: `example-verbmobil-2.wav`
- ▶ `\audiofile{<script>}`: `example-verbmobil-1.wav`
- ▶ `\audiofiletext{<script>}{<text>}`: **Example 2 from Verbmobil2**

Playing Video Files

Video examples from the LTI–Gesture and i6–Gesture database:

- ▶ `\videofilethumbnailbox{<script>}{<param>}{<image>}`: 
- ▶ `\videofilethumbnail{<script>}{<param>}{<image>}`: 
- ▶ `\videofilelogobox{<script>}`:  `i6gesture.avi`
- ▶ `\videofilelogo{<script>}`:  `i6gesture.avi`
- ▶ `\videofilebox{<script>}`: `i6gesture.avi`
- ▶ `\videofile{<script>}`: `i6gesture.avi`
- ▶ `\videologo{<script>}`: 
- ▶ `\videofiletext{<script>}{<text>}`: **Example from i6–Gesture database**

There are also icons for CDs  and DVDs  which you can use to play videos from an external device. Just write a script to mount the device and a player command which will start playing a file from the mounted device.

Formulas

Write formulas with the `\begin{equation}` environment or with the double `$$` signs, use a single `$` sign if you want to write a formula on the same text line.

► numbered equation

$$h_c(X) = \frac{1}{L_X} \sum_{l=1}^{L_X} \delta(c, c(x_l)) \quad (1)$$

► unnumbered equation

$$h_c(X) = \frac{1}{L_X} \sum_{l=1}^{L_X} \delta(c, c(x_l))$$

or use

$$h_c(X) = \frac{1}{L_X} \sum_{l=1}^{L_X} \delta(c, c(x_l))$$

► with $h_c(X) = \frac{1}{L_X} \sum_{l=1}^{L_X} \delta(c, c(x_l))$ on the same line.

Tables

You can use the `\begin{table}` environment to present your results. Also you can link the whole table to another slide with the `\hyperlink` command in combination with `\textcolor{black}`, otherwise the table would appear in link color.

Some results achieved at the .

Table caption above. [Click on the table](#) to jump to the Appendix

	motorbikes	bicycles	people	cars
Task 1	6,8 (17)	5,8 (15)	5,6 (15)	4,5 (17)
Task 2	2,3 (11)	2,3 (9)	2,3 (9)	2,3 (10)

Tables

Error rates [%] for different HMM features using the nicer *booktabs* style

Spatial derivative (Sobel)	Original	1st time derivative	2nd time derivative
no	5.7	5.0	15.7
horizontal	10.0	9.2	20.0
vertical	5.0	4.2	16.4
magnitude	7.1	5.0	7.1
squared magnitude	8.5	16.4	34.2

Table using `cmidrule` command

Densities	Pooling	Gaussian ER[%]	Laplacian ER[%]
Single	No	29.2	30.7
	Yes	29.2	30.7
Mixture	No	21.4	29.2
	Yes	23.5	27.8

Citing

Use the `\cite{<anchor>}` command to refer to an entry in your bibliography.
You can click on the citation to jump to your bibliography.
You can use the backreferences in the bibliography to jump back to your slide.

Example* a) Results on Caltech database: [?]
very good on motorbikes and airplanes, quite good on faces

Example* b) Results on medical radiographs:[?]
quite good, specialized approaches are better

***The `enumerate` environment from the `paralist` package can use special labels.**

Colors

- ▶ How to **highlight** words? This can be done by the `\alert{<text>}` command. You should use this command for **important** words.
- ▶ You can use **additional colors** with the `\textcolor{<color>}` command in your **slides** to **highlight words**, but don't use **too much colors!**
The `\alert{<text>}` command should always be **preferred**

Spoken:

also ich vielleicht ist grade zu der Zeit die CeBit das wäre vielleicht für uns fachlich auch ganz interessant

Recognized:

also ich vielleicht **das** grade zu der Zeit die CeBit das wäre vielleicht — uns fachlich auch **noch** ganz interessant

substitution **insertion** — deletion

$$\text{WER} = \frac{1 \text{ deletion} + 1 \text{ insertion} + 1 \text{ substitution}}{19 \text{ spoken words}} = 15.8\%$$

Page Numbering

- ▶ you can use the package option `lastpage` or `userlastpage` to enable a page numbering like “n of m”, otherwise the pages will have a single page number.
- ▶ if you use the package option `userlastpage` **you have to** call `\LastPage` or `\FinalPage` at the end of your last slide to enable a correct numbering of the slides.
- ▶ `\FinalPage` will automatically generate a “Thank you for your attention page” with your name, email and www address.
- ▶ you can change the layout of *your* last page by using `\FinalPage` at the end of your last slide. This will simply insert a blank page and enable a correct numbering of the slides.
- ▶ you can also use `\LastPage` or `\FinalPage` without specifying the package option `lastpage`. This won't affect the page numbering.
- ▶ to disable the page numbering you must use the the package option `nonumber`.

Changing Logos

- ▶ you can display a third logo in the topleft corner on each slide by redefining `\topleftlogo`

- ▶ **Example 1:**

```
\renewcommand{\topleftlogo}{\includegraphics[height=6mm]{\logodir YOUR-THIRD-LOGO}}
```

- ▶ **Example 2:**

```
\renewcommand{\topleftlogo}{\includegraphics[height=6mm]{/u/path/to/your/third/LOGO}}
```

- ▶ Also you could redefine the other logos `\toprightlogo` and `\bottomrightlogo` in this way

Page Titles

You can break pages if you choose the option `allowpagebreaks`, the title will be repeated on the next slide ...

... as you can see (or not, depending on the option) !

Converting And Printing The Slides

► XEmacs editor:

- ▷ change into PDF-mode with `C-c C-t C-p` if you want to create PDF slides, otherwise PS slides will be created
- ▷ run `LATEX` with `C-c C-c`
- ▷ run again to open the standard viewer `xpdf` or `xdvi` depending on the mode

► Creating PDF or PS slides on the command line:

- ▷ type `pdflatex slides` and `xpdf slides.pdf` to view the result
- ▷ type `latex slides`, `dvips slides`, and `gv slides.ps` to view the result

► Converting:

- ▷ use `dvipdf slides` to convert the created PS-dvi files into PDF-slides
- ▷ use `dvips slides` to convert the created PS-dvi files into PS-slides

► Handout Printing:

- ▷ PDF-slides: use the Acrobat Reader to print the slides with printer option `/usr/bin/lpz -4slidesland`
- ▷ PS-slides: use `gv` with printer option `/usr/bin/lpz -4slidessea`

Thank you for your attention

Philippe Dreuw

`dreuw@informatik.rwth-aachen.de`

`http://www-i6.informatik.rwth-aachen.de/`

PS: This page was generated automatically by calling `\FinalPage`.

References

Appendix: First Slide

Hyper Target on the first appendix slide. Look at the current page number.

Appendix: Table Data

Table Data on the second appendix slide. Look at the current page number.

Appendix: Includegraphics Clip, Crop

