Hochschule
Bonn-Rhein-Sieg
University of Applied Sciences

Title of presentation

Subtitle of presentation

First Name

March 20, 2017

Outline for Section 1

Jabberwocky

Lewis Carroll

’Twas brillig, and the slithy toves
Did gyre and gimble in the wabe;
All mimsy were the borogoves,
And the mome raths outgrabe.

“Beware the Jabberwock, my son!
The jaws that bite, the claws that catch!
Beware the Jubjub bird, and shun
The frumious Bandersnatch!”

Lists and locales

Lorem ipsum dolor sit amet

- Nulla nec lacinia odio. Curabitur urna tellus.
  - Fusce id sodales dolor. Sed id metus dui.
    - » Cupio virtus licet mi vel feugiat.

1. Donec porta, risus porttitor egestas scelerisque video.
   1.1 Nunc non ante fringilla, manus potentis cario.
      1.1.1 Pellentesque servus morbi tristique.

Nechť již hříšné saxofony ďáblů rozzvučí síň úděsnými tóny waltzu, tanga a quickstepu! Nezvyčajné kŕdle šťastných figliarskych ďatľov učia pri kótovanom ústí Váhu mĺkveho koňa Waldemara obžierať väčšie kusy exkluzívnej kôry. The quick, brown fox jumps over a lazy dog. DJs flock by when MTV ax quiz prog. “Now fax quiz Jack!”

Text blocks

In plain, example, and alert flavour

This text is highlighted.

A plain block

This is a plain block containing some highlighted text.

An example block

This is an example block containing some highlighted text.

An alert block

This is an alert block containing some highlighted text.

Definitions, theorems, and proofs

All integers divide zero

Definition

$\forall a, b \in \mathbb{Z} : a \mid b \iff \exists c \in \mathbb{Z} : a \cdot c = b$

Theorem

$\forall a \in \mathbb{Z} : a \mid 0$

Proof

$\forall a \in \mathbb{Z} : \cdot 0 = 0$ $\square$

Numerals and Mathematics

Formulae, equations, and expressions

12345678901234567890 $\hat{x}, \check{x}, \tilde{a}, \bar{a}, \dot{y}, \ddot{y}$ $\iint f(x, y, z)\,\mathrm{d}x\mathrm{d}y\mathrm{d}z$

$$\frac{1}{1+\frac{1}{2+\frac{1}{3+x}}} + \frac{1}{1+\frac{1}{2+\frac{1}{3+x}}} \qquad F: \begin{vmatrix} F''_{xx} & F''_{xy} & F'_x \\ F''_{yx} & F''_{yy} & F'_y \\ F'_x & F'_y & 0 \end{vmatrix} = 0$$

$$\iint\limits_{\mathsf{x}\in\mathbb{R}^2} \langle \mathsf{x}, \mathsf{y} \rangle \, \mathsf{dx} \qquad \overline{\overline{a\alpha}^2 + \underline{b\beta} + \overline{\overline{d\delta}}} \qquad]0,1[+ \lceil x \rfloor - \langle x, y \rangle$$

$$\begin{aligned} e^x \quad &\approx \quad 1 + x + x^2/2! + \\ &\qquad + x^3/3! + x^4/4! \end{aligned} \qquad \binom{n+1}{k} = \binom{n}{k} + \binom{n}{k-1}$$

Figures

Tables, graphs, and images

Faculty	With TEX	Total	%
Faculty of Informatics	1 716	2 904	59.09
Faculty of Science	786	5 275	14.90
Faculty of Economics and Administration	64	4 591	1.39
Faculty of Arts	69	10 000	0.69
Faculty of Medicine	8	2 014	0.40
Faculty of Law	15	4 824	0.31
Faculty of Education	19	8 219	0.23
Faculty of Social Studies	12	5 599	0.21
Faculty of Sports Studies	3	2 062	0.15

Table 1: The distribution of theses written using TEX during 2010–15 at MU

Figures

Tables, graphs, and images

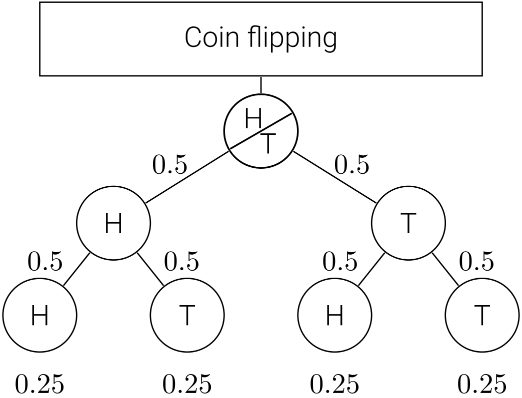

Figure 1: Tree of probabilities – Flipping a coin[1]

[1] A derivative of a diagram from `texample.net` by cis, CC BY 2.5 licensed

Code listings

An example source code in C

```c
#include <stdio.h>
#include <unistd.h>
#include <sys/types.h>
#include <sys/wait.h>

// This is a comment
int main(int argc, char **argv)
{
        while (--c > 1 && !fork());
        sleep(c = atoi(v[c]));
        printf("%d\n", c);
        wait(0);
        return 0;
}
```

Citations

TeX, LaTeX, and Beamer

TeX is a programming language for the typesetting of documents. It was created by Donald Erwin Knuth in the late 1970s and it is documented in *The TeXbook* [1].
In the early 1980s, Leslie Lamport created the initial version of LaTeX, a high-level language on top of TeX, which is documented in *LaTeX: A Document Preparation System* [2]. There exists a healthy ecosystem of packages that extend the base functionality of LaTeX; *The LaTeX Companion* [3] acts as a guide through the ecosystem.
In 2003, Till Tantau created the initial version of Beamer, a LaTeX package for the creation of presentations. Beamer is documented in the *User's Guide to the Beamer Class* [4].

Bibliography

TEX, LATEX, and Beamer

- Donald E. Knuth. *The TEXbook*. Addison-Wesley, 1984.
- Leslie Lamport. *LATEX: A Document Preparation System*. Addison-Wesley, 1986.
- M. Goossens, F. Mittelbach, and A. Samarin. *The LATEX Companion*. Addison-Wesley, 1994.
- Till Tantau. *User's Guide to the Beamer Class Version 3.01*. Available at `http://latex-beamer.sourceforge.net`.
- A. Mertz and W. Slough. Edited by B. Beeton and K. Berry. *Beamer by example* In TUGboat, Vol. 26, No. 1., pp. 68-73.

Outline for Section 2

There Is No Largest Prime Number

The proof uses reductio ad absurdum.

Theorem

There is no largest prime number.

1. Suppose p were the largest prime number.

4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.

There Is No Largest Prime Number

The proof uses reductio ad absurdum.

Theorem

There is no largest prime number.

1. Suppose p were the largest prime number.
2. Let q be the product of the first p numbers.

4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.

There Is No Largest Prime Number

The proof uses reductio ad absurdum.

Theorem

There is no largest prime number.

1. Suppose p were the largest prime number.
2. Let q be the product of the first p numbers.
3. Then $q + 1$ is not divisible by any of them.
4. But $q + 1$ is greater than 1, thus divisible by some prime number not in the first p numbers.

A longer title

- one
- two
  This is a test of bold text