# Introducing Impressive

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version 0.12.0

http://impressive.sourceforge.net/

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## What is Impressive?

**Impressive is a PDF and image viewer optimized for presentations**

- ... with some eye candy ;)
- uses OpenGL for display
- uses MuPDF or Xpdf to render PDF files
- written in Python
- available for Unix-like and Windows operating systems
- Open Source (GPLv2)

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# Software Requirements

Impressive requires a few libraries
and helper applications:

- Python 2.7
- PyGame (SDL bindings for Python)
- Python Imaging Library (PIL or Pillow)
- MuPDF-Tools
- *optional:* pdftk, MPlayer, FFmpeg

Packages for these dependencies should be available
for almost every operating system.
For Windows, there's a convenient self-contained archive
with everything needed.

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# Hardware Requirements

- hardware accelerated OpenGL 2.0
  or OpenGL ES 2.0
  - any GPU from 2005 or later should do
  - integrated graphics or mobile GPUs are fine
  - on fast CPUs, even a JIT-accelerated software
    renderer (e.g. Gallium LLVMpipe) is sufficient
- CPU performance generally not very important
  - runs OK on Raspberry Pi

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# How does it work?

1. create slides with the presentation software of your choice
2. export them to a PDF file
3. `impressive MySlides.pdf`
   - left mouse button, mouse wheel down,
     $\boxed{\text{Page} \downarrow}$ or $\boxed{\text{Space}}$ :
       next slide
   - right mouse button, mouse wheel up,
     $\boxed{\text{Page} \uparrow}$ or $\boxed{\text{Backspace}}$ :
       previous slide
   - $\boxed{\text{Q}}$ or $\boxed{\text{Esc}}$ : quit

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# Emphasis

Impressive offers multiple ways of emphasizing parts of a page.

**Option 1:** „Spotlight"

- toggle with Enter
- a bright circular spot follows the mouse cursor
- everything else gets dark and blurry
- spot size adjustable with + / − or the mouse wheel

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# Highlight Boxes

**Option 2:** Highlight Boxes

- drag a box with the left mouse button
- everything else gets dark and blurry
- any number of boxes per page
- delete a box by clicking it with the right mouse button
- boxes stay even after leaving and re-entering the page

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# Zoom

**Option 3:** Box Zoom

- hold ⌜Ctrl⌝ while dragging a box
  with the left mouse button
- selected area zooms in so it covers the full screen
- everything else is faded out

**Option 4:** Zoom and Pan

- ⌜Z⌝ key toggles 2x zoom
- visible part can be moved around
  by dragging with the middle mouse button
- zoom level can be fine-tuned with the mouse wheel

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# Overview Page

- press the $\boxed{\text{Tab}}$ key
- Impressive zooms back to an overview screen showing all pages of the presentation
- new page can be selected with mouse or keyboard
- left mouse button or $\boxed{\text{Enter}}$ zooms into selected page
- right mouse button or $\boxed{\text{Tab}}$ cancels and returns to the previously shown page

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# Customization

- command line parameters *(lots of them!)*
- „Info Scripts"
  - same name as the input file, but suffix .info,
    e.g. slides.pdf → slides.pdf.info
  - real Python scripts, executed before the presentation starts
  - can be used to set the document title or other settings
  - can be used to set up per-page settings:
    „Page Properties"
    - title
    - transition effect
    - ...

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# Info Script Example

```
# -*- coding: iso8859-1 -*-

DocumentTitle = "Example Presentation"

PageProps = {
    1: { 'title': 'Title Page' },
    2: { 'title': 'Introduction',
         'transition': PagePeel },
    5: { 'timeout': 3500 },
    8: { 'overview': False }
}
```

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# Other Features

- clickable PDF hyperlinks inside the document
- background rendering, pages cached in RAM or disk
- time display and measurement
- automatic, timed presentations
    - can turn a Raspberry Pi into a digital signage system
- automatic reloading of the input file(s) on change
- playing sounds or videos or executing arbitrary Python code when entering a page
- fully customizable keyboard and mouse controls
- zoom with the mouse wheel

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# More Features

- fade to black or white
- rotation in 90-degree steps
- page bookmarks (keyboard shortcuts)
- only show a subset of the presentation
- hide specific pages from the overview page
- customization of almost every timing or OSD parameter
- permanent storage of the highlight boxes
- "Render Mode": doesn't show the presentation, but renders the input PDF file into a directory with one PNG file per page

# Missing Features

- painting and annotations
- multi-monitor support
- "Presenter Screen" with notes etc.
- support for embedded videos
- integration into (or cooperation with) latex-beamer and OpenOffice.org Impress
- *your feature here*

# Get in touch

**Questions, Suggestions, Comments?**
just write to
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**Try Impressive!**
downloads are available at
http://impressive.sourceforge.net/
and packages in most Linux distributions