

Introducing Simbe for Technical Slides

Simbe

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- Simbe is an ultralight markup language for math / code heavy slides
- I wrote it in 2013 when I had to prepare 600+ slides for teaching a new course
- PowerPoint and Keynote were not feasible options for technical slides
- LaTeX Beamer has too much markup overhead for simple functionalities
- Simbe is a very simple LaTeX preprocessor written in Python 3
- It converts a Simbe file to a standard latex file which is compiled to PDF slides
- Simbe is short for Simple LaTeX Beamer

- Simbe makes the following LaTeX / Beamer operations easy
 - Bullets
 - Equations
 - Figures
 - Code with syntax highlighting
- These cover 99% of my needs, but it's really just LaTeX, so you can do anything
- This is a famous equation:

$$E = mc^2 \tag{1}$$

- Computers are now used everywhere in science

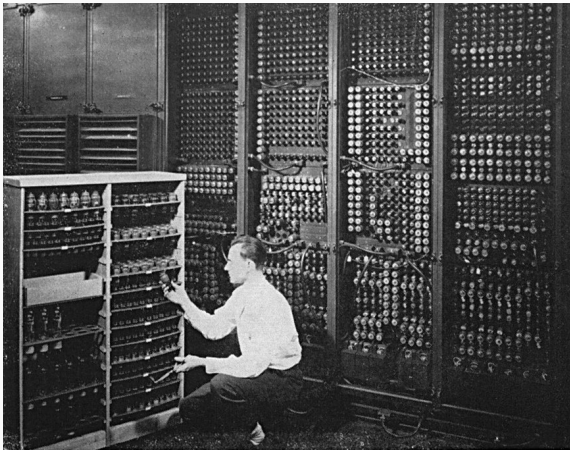


Figure: This is a serious computer.

- Python is increasingly used in research settings
- Check out my HarvardX course “Using Python for Research”
- Here’s a simple Python program with syntax highlighting:

```
1 from math import pi
2 print(pi)
```

- Some programs are more complicated
- In some cases it's better to place a program in its own file
- It's especially helpful if you want to execute code on your slides
- Here's Python code for generating the Fibonacci sequence

```
1 def fibonacci(n):  
2     a = b = 1  
3     for i in range(n):  
4         yield a  
5         a, b = b, a + b  
6  
7 for k in fibonacci(10):  
8     print(k)
```