Introduction to LaTeX

Shawn Tan

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Pronounciation

{lay,lah}-teck

Samples

A brief history

1974	Donald Knuth stops submitting papers to American Mathematical Society(AMS)
1977	Knuth begins research into typography
1978	Knuth delivers an AMS Gibbs Lecture entitled Mathematical Typography
1979	TEXfinished[1]
Early 1980s	LATEX, a set of macros to make life easier when working with TEXcompleted by Leslie Lamport.

[1] http://www.xent.com/FoRK-archive/feb98/0307.html

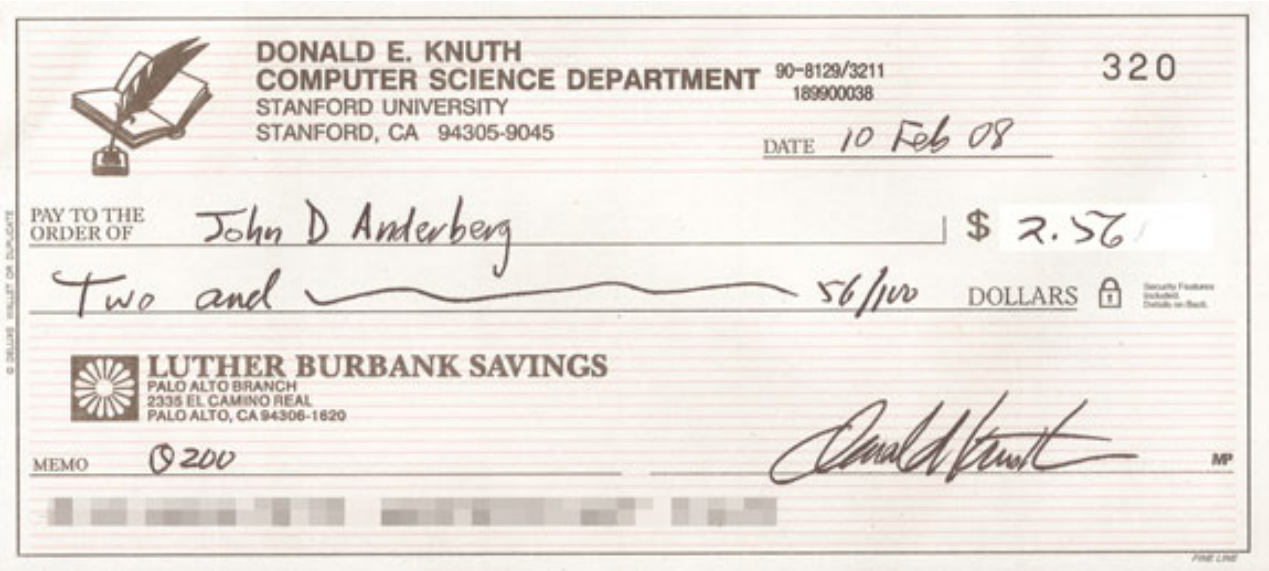
Real programmers code with butterflies!

"When I wrote TeX originally in 1977 and 78, of course I didnt have literate programming but I did have structured programming. I wrote it in a big notebook in longhand, in pencil."- Knuth [2]

[2] Coders at Work

Knuth's bank

"Intelligence: Finding an error in a Knuth text.
Stupidity: Cashing that $2.56 check you got."
- a Slashdot signature[3]



[3] http://www.stgray.com/quotes/programmingquotes.html

LaTeX- the (few) good parts I

$$e^{i\pi} + 1 = 0$$

$$P(A|B) = \frac{P(B|A)P(A)}{P(B)}$$

LaTeX- the (few) good parts III

$$P(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{\frac{(x-\mu)^2}{2\sigma^2}}$$

LaTeX- the (few) good parts IV

$$\cfrac{1}{1+\cfrac{1}{1+\cfrac{1}{1+\cfrac{1}{1+\cfrac{1}{\pi}}}}}$$

Bibliography

LaTeX- urghhh..

Verbose, too much like programming

Line noise

```
\[ M[i,j] =
\left\{ \begin{array}{l l} 0 & \quad \text{if } i=0
\text{ or } j=0\\
M[i-1,j] & \quad \text{if } w_i > j\\
\max \left( M[i-1,j-w_i] + v_i, M[i-1,j] \right)
& \quad \text{if } w_i \leq j\\
\end{array} \right. \]
```

$$M[i,j] = \begin{cases} 0 & \text{if } i = 0 \text{ or } j = 0 \\ M[i-1,j] & \text{if } w_i > j \\ \max\left(M[i-1,j-w_i] + v_i, M[i-1,j]\right) & \text{if } w_i \leq j \end{cases}$$