

A Demonstration

Of my BMC, created thanks to \LaTeX

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January 2, 2019

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1 This is a Chapter



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1.1 Content

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i About this
This is Lorem Ipsum

1.1.1 More content

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i Relevant Info

In publishing and graphic design, lorem ipsum is a placeholder text used to demonstrate the visual form of a document without relying on meaningful content (also called *greeking*)

1.1.2 Another subsection

Nam nec nisl tristique, pellentesque magna non, pretium nunc. Nunc non leo sapien. In hac habitasse platea dictumst. Cras laoreet augue lacus, nec cursus ante lobortis nec. Aliquam at neque ut quam consectetur hendrerit. Sed eu nibh at ipsum aliquam volutpat non ut mi. Integer sed tortor ut justo lobortis scelerisque. Nunc in gravida tortor, euismod tincidunt orci. Mauris euismod leo eget leo auctor, sed faucibus tellus gravida.

1.2 Some Code

```

1  import numpy as np
2
3  def incmatrix(genl1,genl2):
4      m = len(genl1)
5      n = len(genl2)
6      M = None # to become the incidence matrix
7      VT = np.zeros((n*m,1), int) # dummy variable
8
9      # compute the bitwise xor matrix (⊖)
10     M1 = bitxormatrix(genl1)
11     M2 = np.triu(bitxormatrix(genl2),1)
12
13     for i in range(m-1):
14         for j in range(i+1, m):
15             [r,c] = np.where(M2 == M1[i,j])
16             for k in range(len(r)):
17                 VT[(i)*n + r[k]] = 1;
18                 VT[(i)*n + c[k]] = 1;
19                 VT[(j)*n + r[k]] = 1;
20                 VT[(j)*n + c[k]] = 1;
21
22             if M is None:
23                 M = np.copy(VT)
24             else:
25                 M = np.concatenate((M, VT), 1)
26
27             VT = np.zeros((n*m,1), int)
28
29     return M
30
31 print("this is a really long line, as far as lines go; as
    ↪ such I fully expect it to be split onto a second line by
    ↪ minted")

```

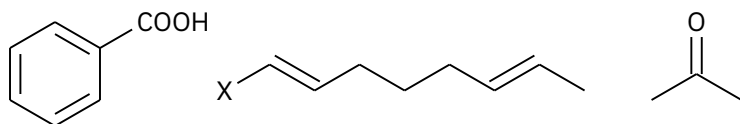
1.3 Some Maths

$$\begin{aligned}
 \mathcal{L}[e^{-at} \sin(\omega t)](s) &= \int_0^{\infty} e^{-st} e^{-at} \sin(\omega t) dt \\
 &\text{using } \sin(\omega t) = \frac{1}{2i} (e^{i\omega t} - e^{-i\omega t}) \\
 &= \frac{1}{2i} \int_0^{\infty} e^{-st-at+i\omega t} - e^{-st-at-i\omega t} dt \\
 &= \frac{1}{2i} \left[\frac{e^{-(s+a-i\omega)t}}{-(s+a-i\omega)} - \frac{e^{-(s+a+i\omega)t}}{-(s+a+i\omega)} \right]_0^{\infty} \\
 &\text{If } s > -a \Rightarrow -s-a < 0 \Rightarrow \lim_{t \rightarrow \infty} e^{-(s+a \pm i\omega)t} = 0 \text{ so,} \\
 &= \frac{1}{2i} \left(\frac{1}{(s+a)-i\omega} - \frac{1}{(s+a)+i\omega} \right) \\
 &= \frac{\omega}{(s+a)^2 + \omega^2}
 \end{aligned}$$

? I have some questions

What even is a laplace transform? Why is the sky blue?

1.4 A Molecule or Two



2 A Second Chapter



Summary

2.1

More Text, 8

2.2

Where Would We Be Without Lipsum?, 8

2.1 More Text

Nunc eros quam, scelerisque vel metus vitae, gravida dapibus tellus. Nunc tincidunt libero et faucibus cursus. Sed sed felis congue, pharetra quam non, gravida urna. Cras ultrices mattis justo sit amet porta. Praesent efficitur sed quam quis varius. Etiam non laoreet lorem, nec efficitur nunc. Nulla nunc nisi, aliquet ac tellus aliquet, auctor sagittis lectus. Quisque interdum mattis facilisis.

! Warning

This paragraph has been reused.

2.2 Where Would We Be Without Lipsum?

Lipsum is a scrambled latin text https://en.wikipedia.org/wiki/Lorem_ipsum. Praesent dapibus vulputate leo eu facilisis. Donec et libero felis. Etiam sollicitudin, odio non sodales lacinia, felis lacus porttitor diam, non hendrerit nisi quam sed lacus. Aliquam erat volutpat. Morbi nisi dui, scelerisque sit amet finibus sed, sollicitudin in erat. Maecenas ac viverra ante, eu malesuada neque. Mauris commodo nisl nec magna pulvinar ultrices. Lorem ipsum dolor sit amet, consectetur adipiscing elit.



A tip

Is sometimes useful

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Check this

Checking things can be a good idea

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Big Issue

Critical stuff needs to be paid attention to

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Hmm, this isn't the best

Different lorem ipsum paragraphs would probably be better

3 A Third Chapter



Summary