SIMPLE BEAM ER TEMPLATE

Modernizing an antiquated style

Spencer Woody

April 26, 2019



Acknowledgements

• Inspired by notes from Professor James Scott

Formatting guidelines

- Use a 4×3 aspect ratio for older projectors
- Use large text for the body and plots
- Body text on a screen is most readable when it is sans-serif, but also use a standard serif font (e.g. Palatino) which has rich math support for math equations
 - Roboto for body text
 - Palatino for math
 - Inconsolata for fixed width text.

Preview of font appearances

The density of the univariate Gaussian random variable denoted by $x \sim \mathcal{N}$ is given by $f(x; \mu, \sigma^2)$, for location parameter μ and scale parameter $\sigma > 0$,

$$f(x; \mu, \sigma^2) = \frac{1}{\sqrt{2\pi\sigma^2}} \exp\left[-\frac{1}{2\sigma^2}(x - \mu)^2\right]$$

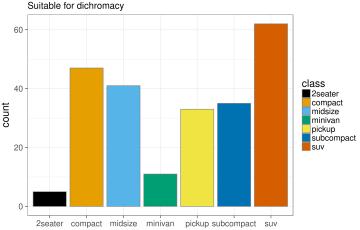
Generally, there is also the multivariate Gaussian $\mathbf{x} \sim \mathcal{N}_p(\mathbf{m}, \Sigma)$. The maximum likelihood estimate is

$$(\hat{\mu}, \hat{\sigma}^2) = \arg\max_{\mu, \sigma} \prod_{i=1}^N f(x_i; \mu, \sigma^2).$$

Conclusion

Formatting

Plotting with a colorblind-friendly palette

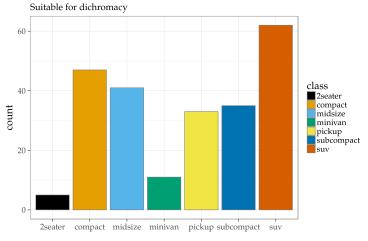


Source: http://jfly.iam.u-tokyo.ac.jp/color/

Figure 1: My figure

The default ggplot2 typeface is Helvetica

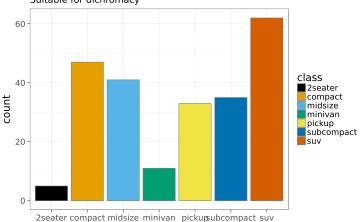
Plotting with a colorblind-friendly palette



Source: http://jfly.iam.u-tokyo.ac.jp/color/

Palatino

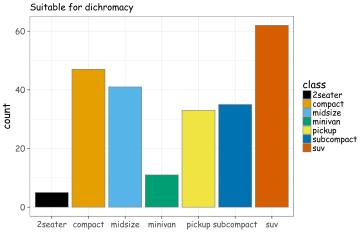
Plotting with a colorblind-friendly palette Suitable for dichromacy



Source: http://jfly.iam.u-tokyo.ac.jp/color/

Lato Sans

Plotting with a colorblind-friendly palette



Source: http://jfly.iam.u-tokyo.ac.jp/color/

Comic Sans

Theorem

Theorem (Mass-energy equivalence)

For mass m, speed of light c = 299,792,458 m/s², the energy equivalence is given by $E = mc^2$.

Columns

Two columns





Conclusion

Personal website: spencerwoody.github.io



Email: spencer.woody@utexas.edu

References I