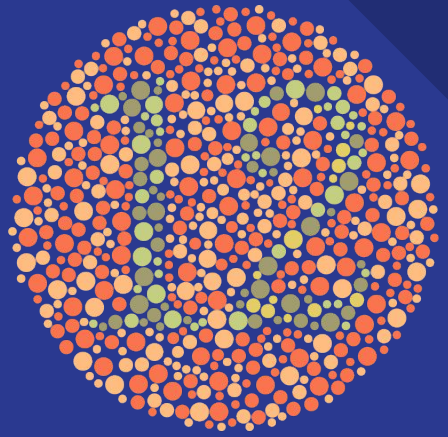
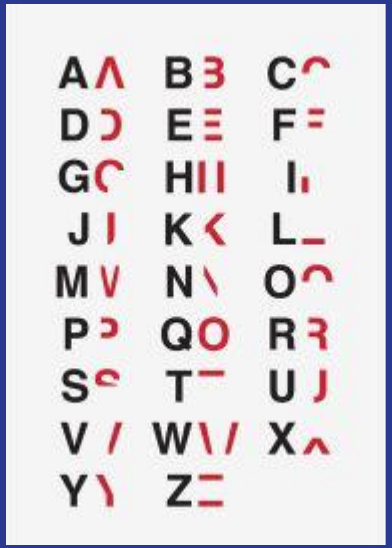
Accessibility in Presentations

Blake Drechsler

Color Blindness



Dyslexia

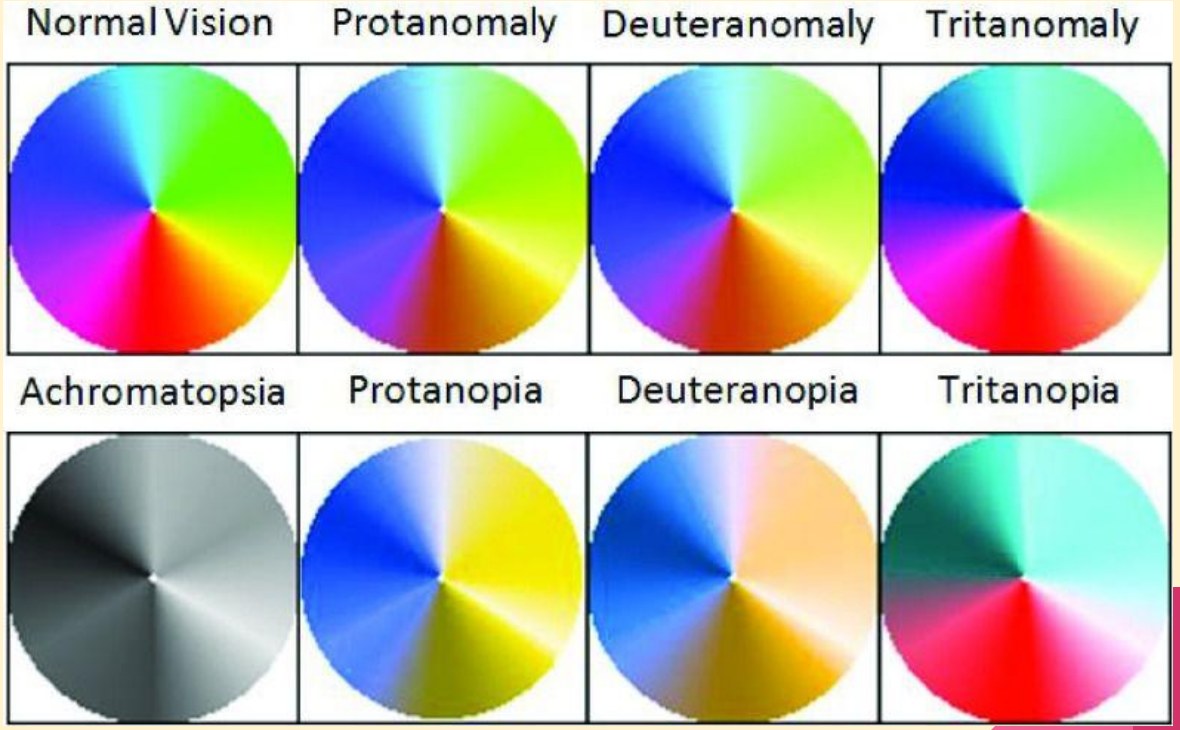


Color Blindness

What is Color Blindness?

- Inherited issue with cone cells
- Anomalous Trichromacy
  - All three cones are present, one is is out of alignment
- Dichromacy
  - Missing a cone, only two are present
- About 1 in 12 men and 1 in 200 women are color blind

Types of Colorblindness



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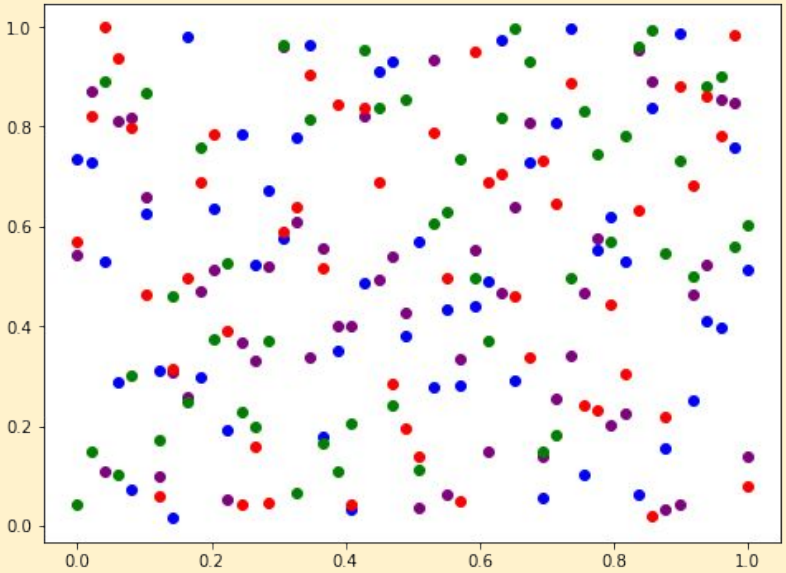
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Data 2
Data 3
Data 4
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0.4
0.6
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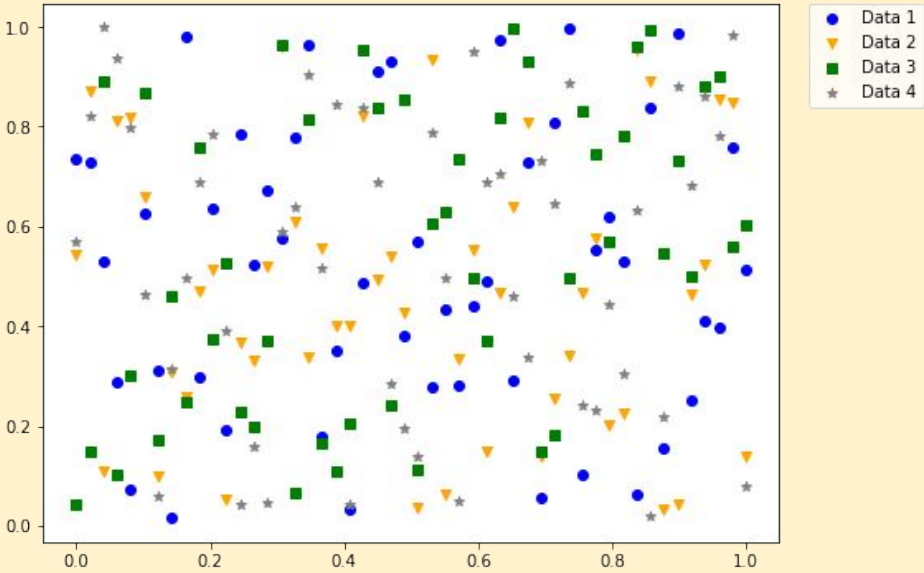
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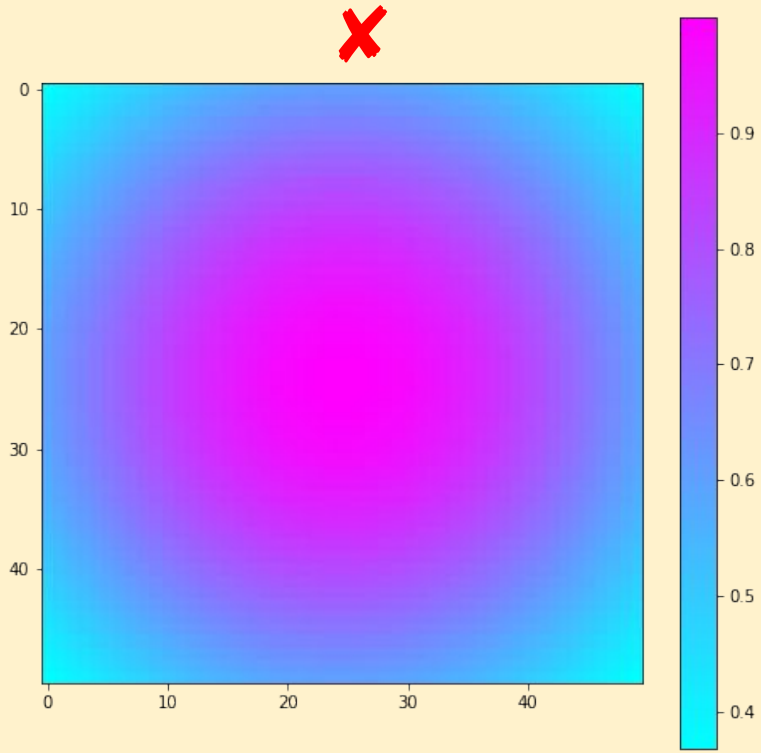
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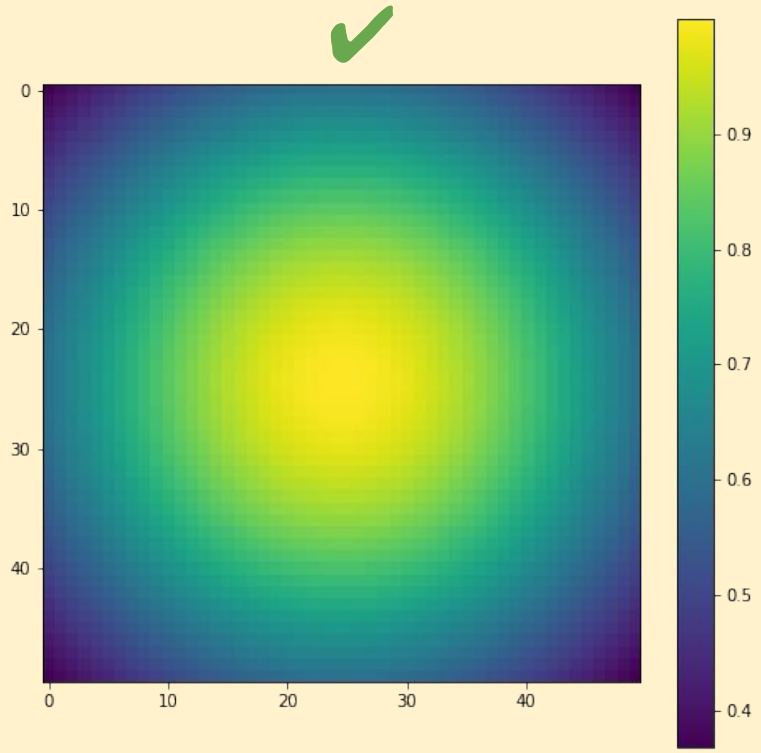
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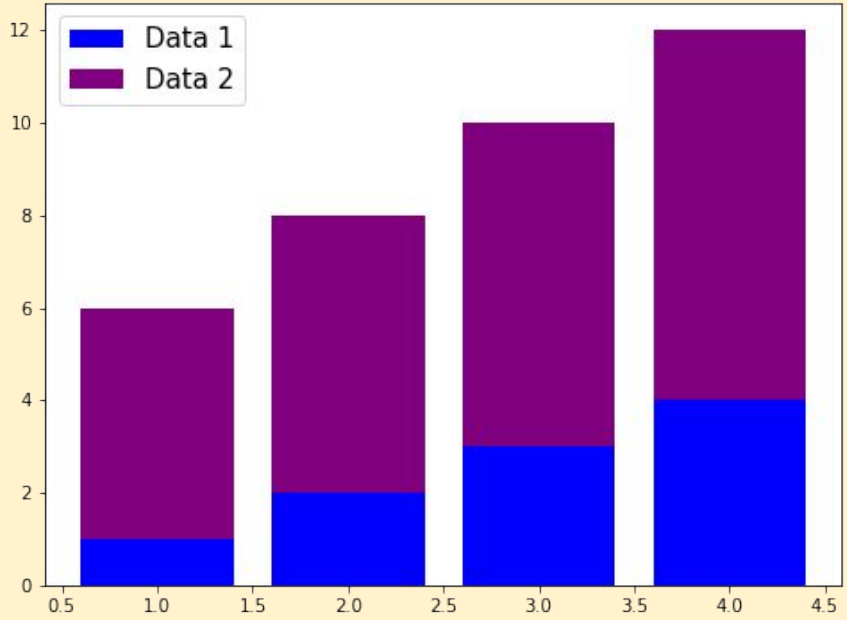
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2.0
2.5
3.0
3.5
4.0
4.5

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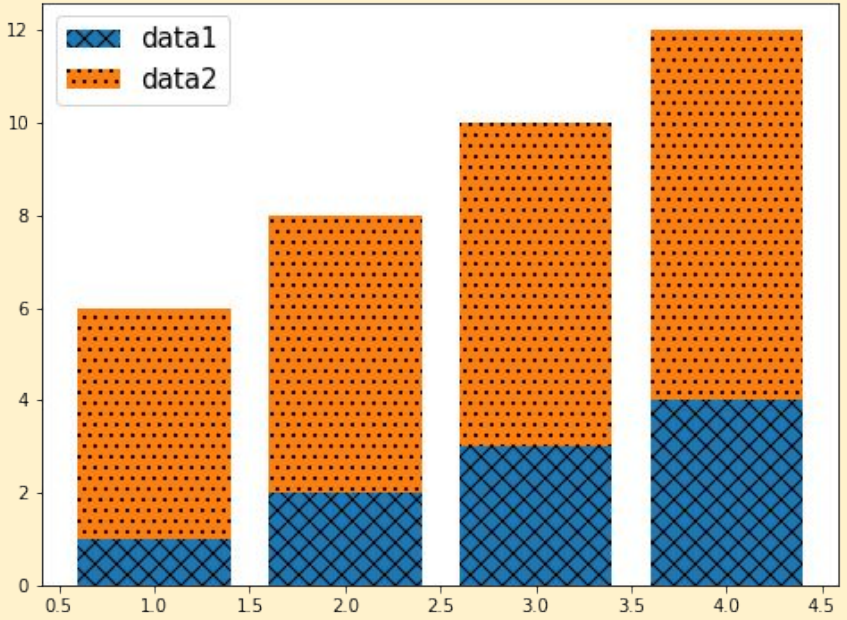
data1
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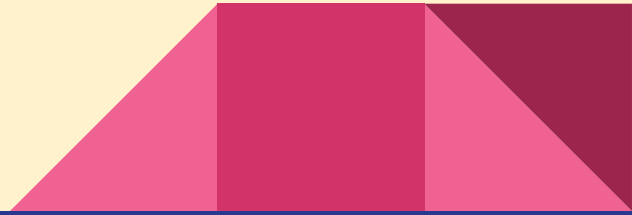
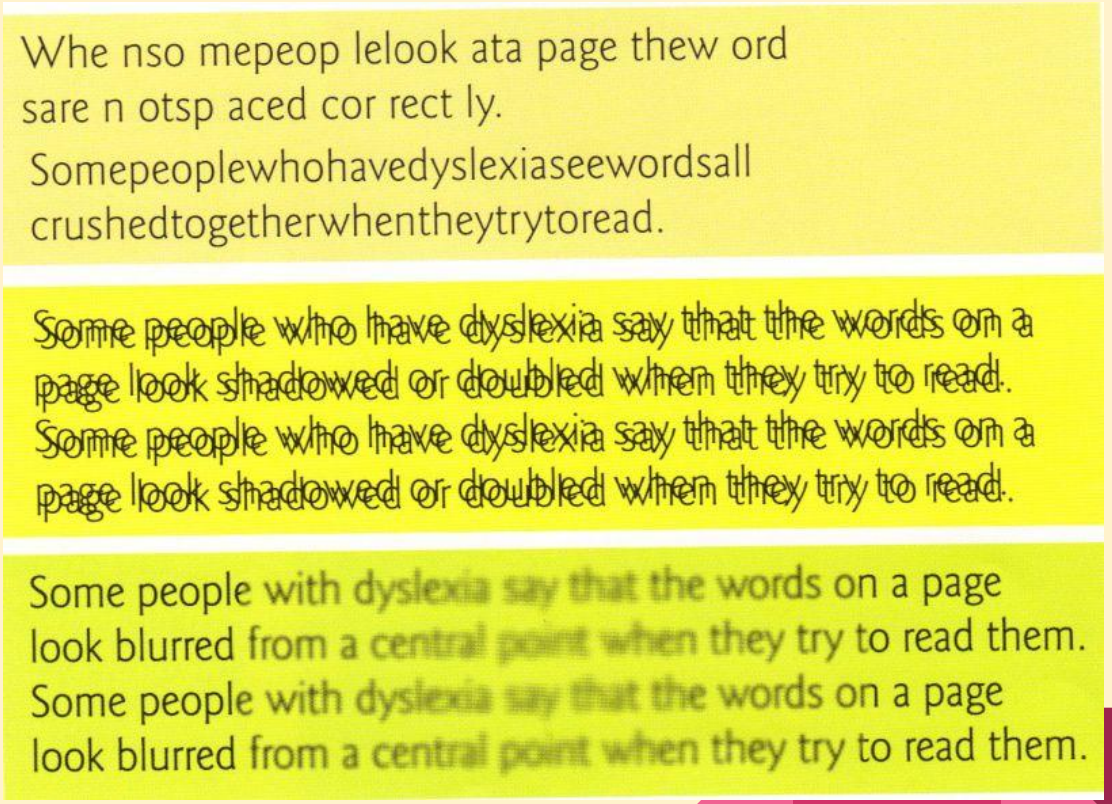
1.0
1.5
2.0
2.5
3.0
3.5
4.0
4.5

Summary

- Use contrasting colors (blue and orange not red and green)
- Supplement colors with symbols
- Try to avoid conveying information with color as much as possible



Dyslexia


Whe nso mepeop lelook ata page thew ord
sare n otsp aced cor rect ly.
Somepeoplewhohavedyslexiaseewordsall
crushedtogetherwhentheytrytoread.
Some people who have dyslexia say that the words on a
page look shadowed or doubled when they try to read.
Some people with dyslexia say that the words on a page
look blurred from a central point when they try to read them.

What is Dyslexia?

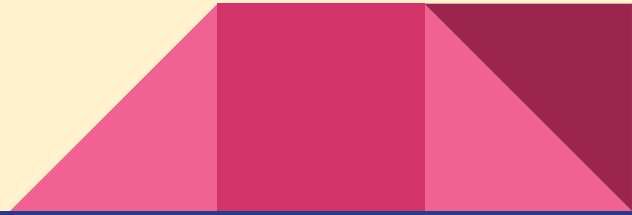
- Learning disability that makes reading more difficult
  - Issue with linking letters on the page with the sounds they make
  - Not related at all with intelligence
- Dyslexia is an issue with learning, not vision
- ~10% of the population are dyslexic

Dyslexia Friendly Fonts

- Best to use sans serif fonts, such as Arial
- OpenDyslexic is a typeface specifically designed to be dyslexia friendly
  - Times New Roman is not recommended
- Avoid italicizing and underlining, use bold for emphasis

Dyslexia Friendly Presentations

- Avoid large blocks of text
- Use larger spacing
- Avoid stark white backgrounds



Conclusion

- There is a good chance that someone in the audience is color blind or dyslexic
- The changes to make presentations accessible are small and easy

Helpful References

- http://dyslexiahelp.umich.edu/sites/default/files/good_fonts_for_dyslexia_study.pdf
- https://www.brightcarbon.com/blog/powerpoint-presentations-and-dyslexia/
- https://opendyslexic.org/
- https://www.color-blindness.com/coblis-color-blindness-simulator/
- https://www.allaboutvision.com/conditions/color-blindness/types-of-color-blindness/