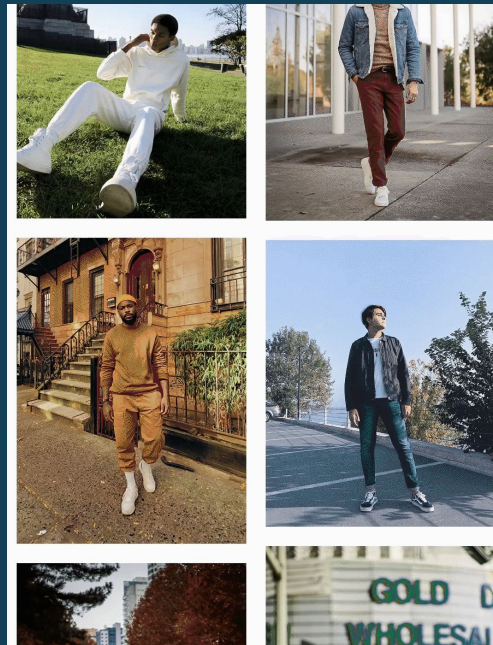




# Improve Search Performance

Nao Kawakami GA Jan 2021



# Outline

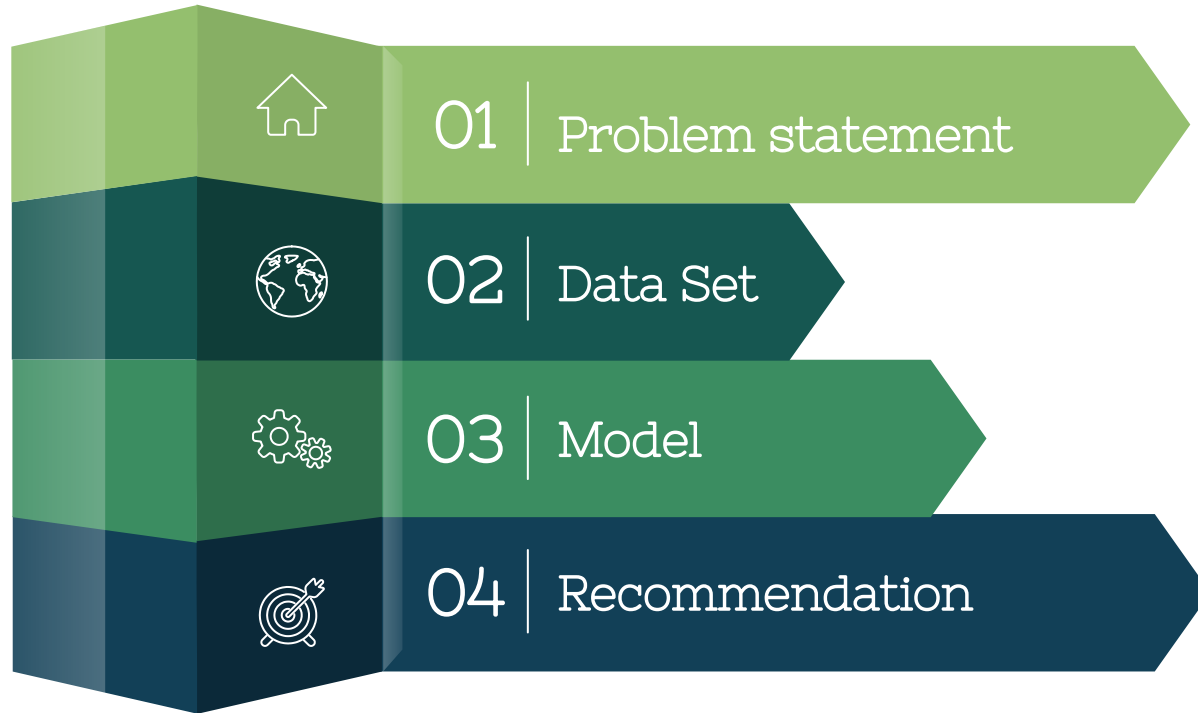


Diagram featured by <http://slidemodel.com>

## Problem statement

It is convenient to get properties of an object with its image when you are not sure what it is





## Data set



The Cathedral Church of St. John the Divine

Catedral Metropolitana Nossa Senhora Aparecida

Patrick's Cathedral

Catedral de La Plata

Cathedral Basilica of the Sacred Heart

Cathédrale Notre-Dame de Chartres

Cattedrale di Santa Maria del Fiore

Kölner Dom

St. Paul's Cathedral

Patriarchal Cathedral ST. Alexander Nevsky



## Data set

- Similarity
- RGB
- Same shape



Cathédrale Notre-Dame de Chartres



# Data set

Let's start with the first set of slides





# Data set

Color Scale

Shape

RGB $\alpha$

(1200, 450, 4)

RGB

(428, 678, 3)

Gray

(564, 680, 1)





## Data set

Image	Color Scale	Height	Width	Shape	
NotreDame_1	RGB $\alpha$	566	728	Remove	
NotreDame_2	RGB	780	1100	-->	(255, 255, 3)
NotreDame_3	P	1200	728	Remove	
NotreDame_4	RGB	875	511	-->	(255, 255, 3)



# Model

Multi-classification

Keras

Sequential with Conv2D



Provide image url

Image URL

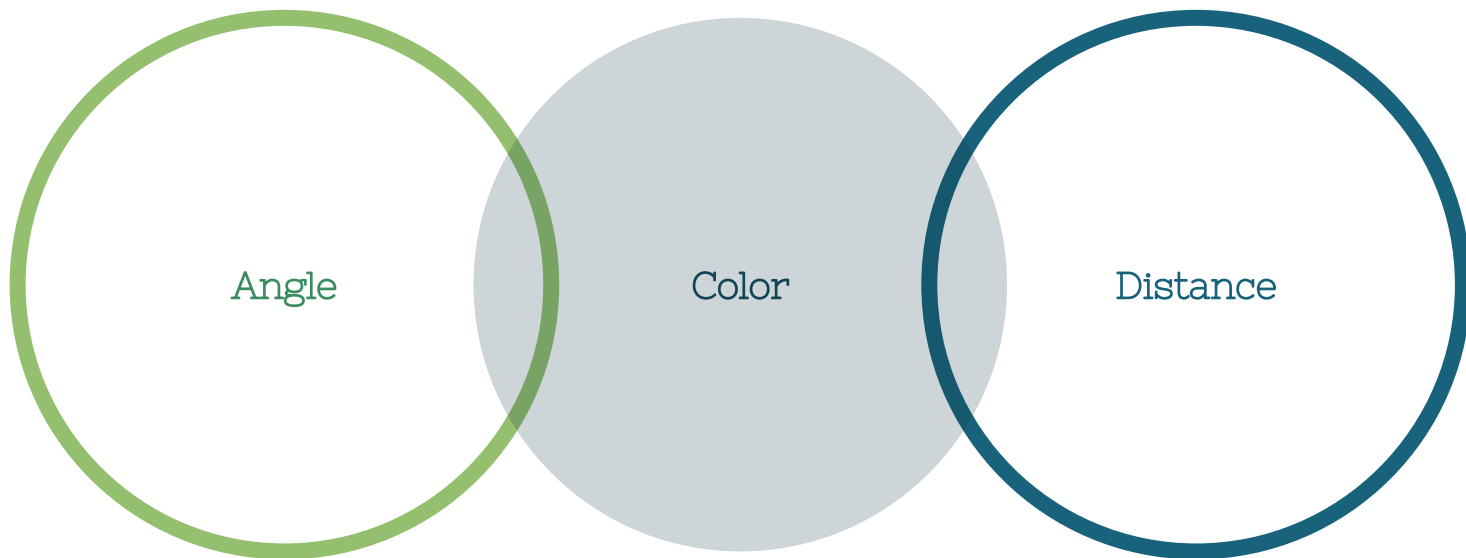
[https://github.com/noah992/Capstone/blob/main/image/demonstration\\_02.JPG?raw=true](https://github.com/noah992/Capstone/blob/main/image/demonstration_02.JPG?raw=true)

READ IMAGE

© Untitled. Design: TEMPLATED. Images: Unsplash.



## Next step





## Credits

Special thanks to all the people who made and released these awesome resources for free:

- Presentation template by [SlidesCarnival](#)
- Photographs by [Unsplash](#), [Lineトラベル](#)
- Demo: [Amazon](#), [Google Map](#)

THANKS!

Any questions?