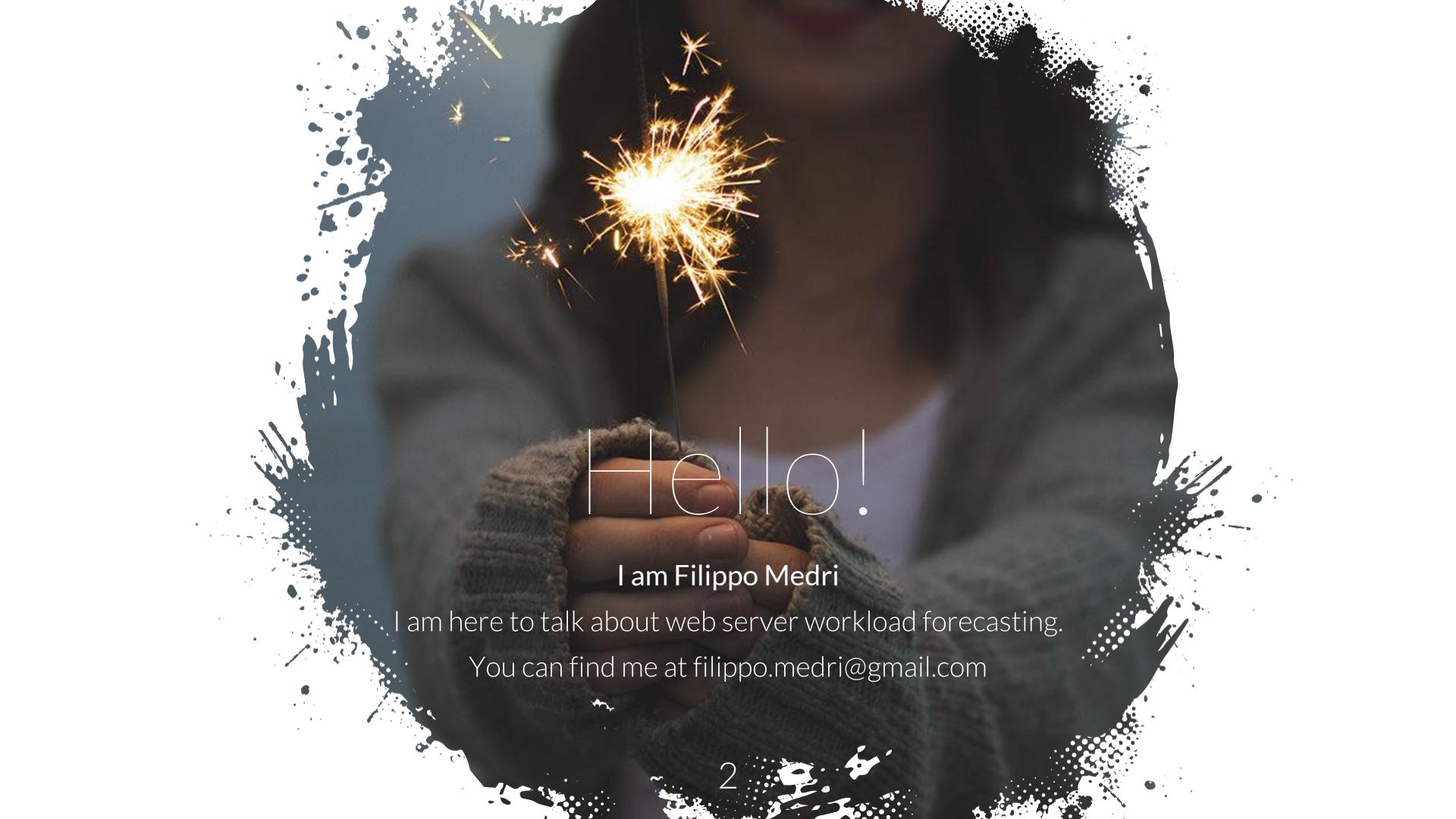


The background of the slide features abstract brushstrokes in shades of green, blue, and white. There are also several clusters of white halftone dots of varying sizes scattered across the left side.

Server Dynamic Autoscaling

Filippo Medri
Metis 2018



Hello!

I am Filippo Medri

I am here to talk about web server workload forecasting.

You can find me at filippo.medri@gmail.com

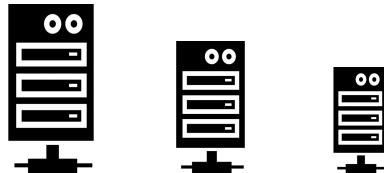


“If someone asks me what cloud computing is, I try not to get bogged down with definitions. I tell them that, simply put, cloud computing is a better way to run your business.”

Marc Benioff

Agenda

- ✗ Workload Prediction from Web Server Log
- ✗ Seasonal ARIMA model
- ✗ LSTM seq2seq model
- ✗ Results

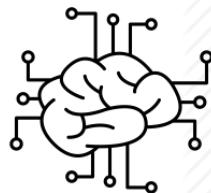


web logs coming from
web server..



Web Log
collection

Request
Trend



... forecast
1 day in advance ...

Request
Forecast

CPU
Scaling



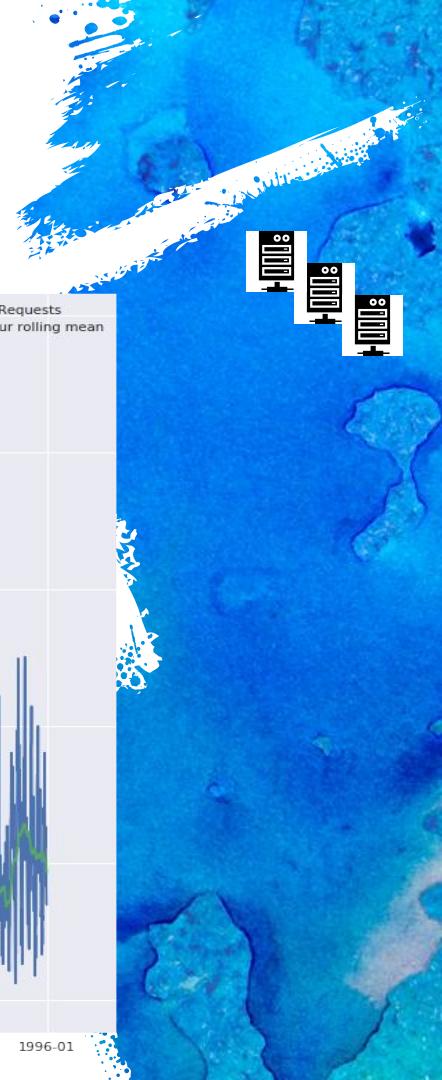
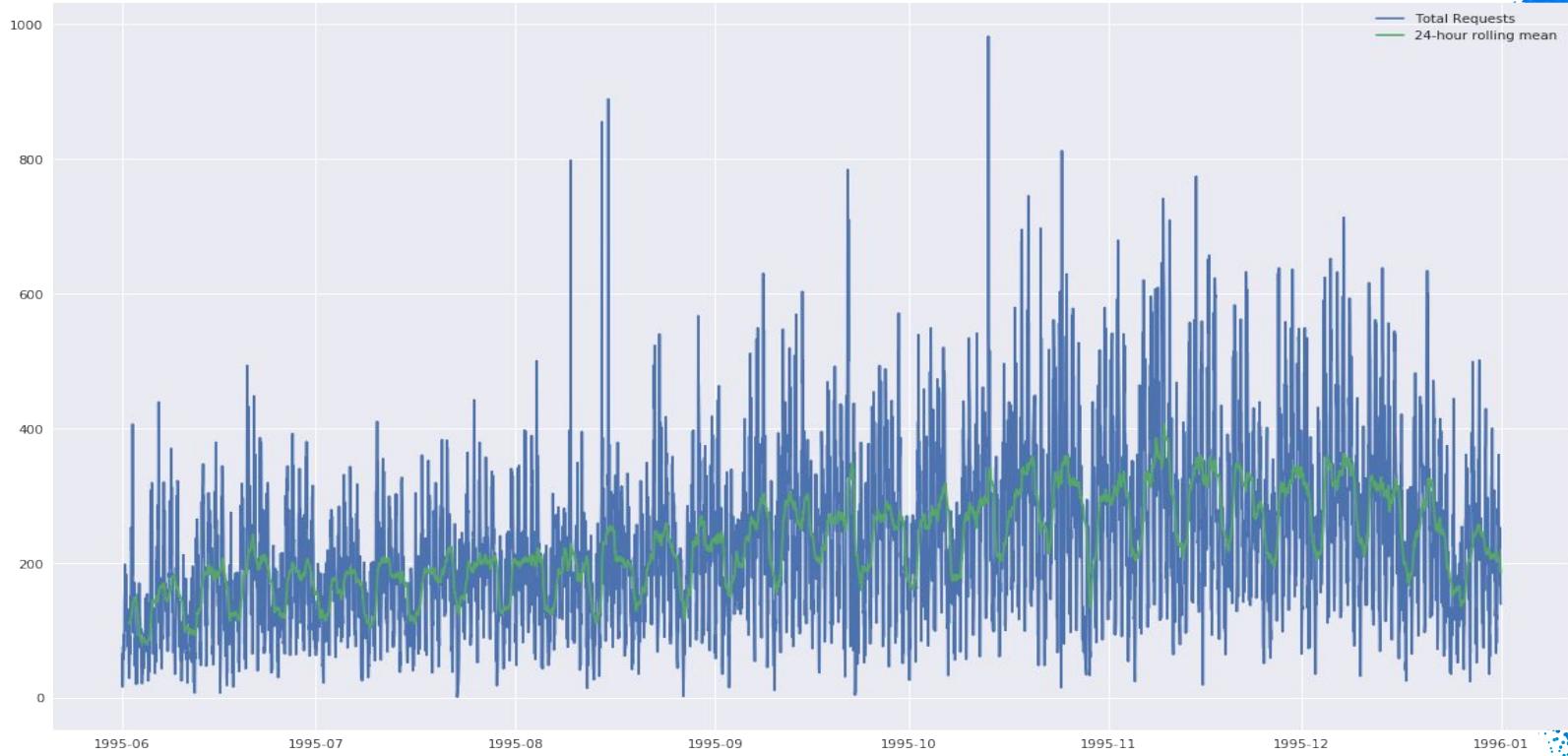
...Scale
the
CPU
size



A landscape photograph featuring a range of mountains in the background under a sky transitioning from orange to blue. Overlaid on the image are ten small white squares, each containing a hand-drawn style paper airplane. The numbers 1,071,840 are prominently displayed in large, white, outlined font in the lower-left area of the image.

1,071,840

5104 #Requests





Dickey Fuller says ...

Test Statistic	p-value	#Lags Used
-6.06	 1.24e-07	5.07e+03

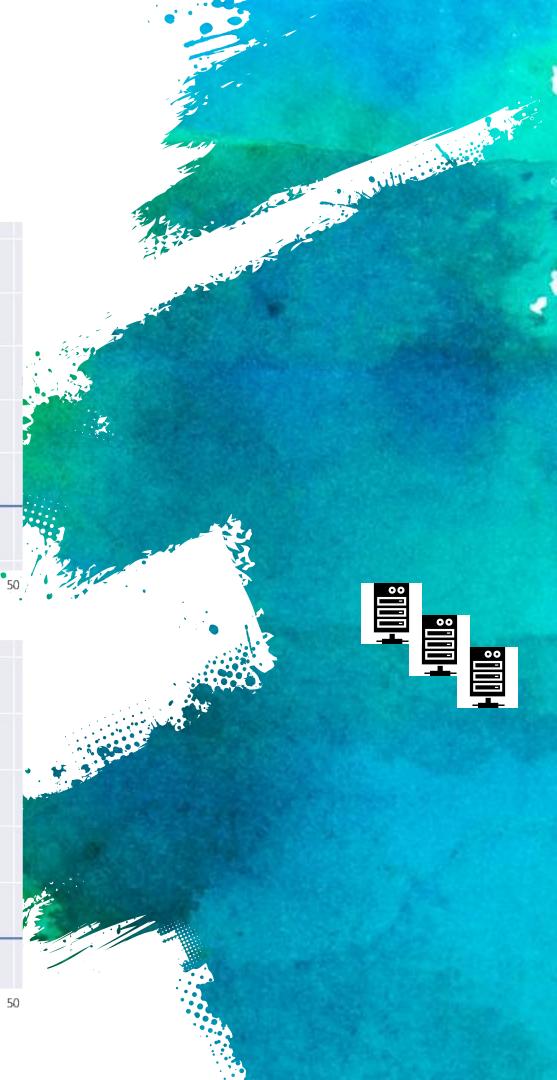
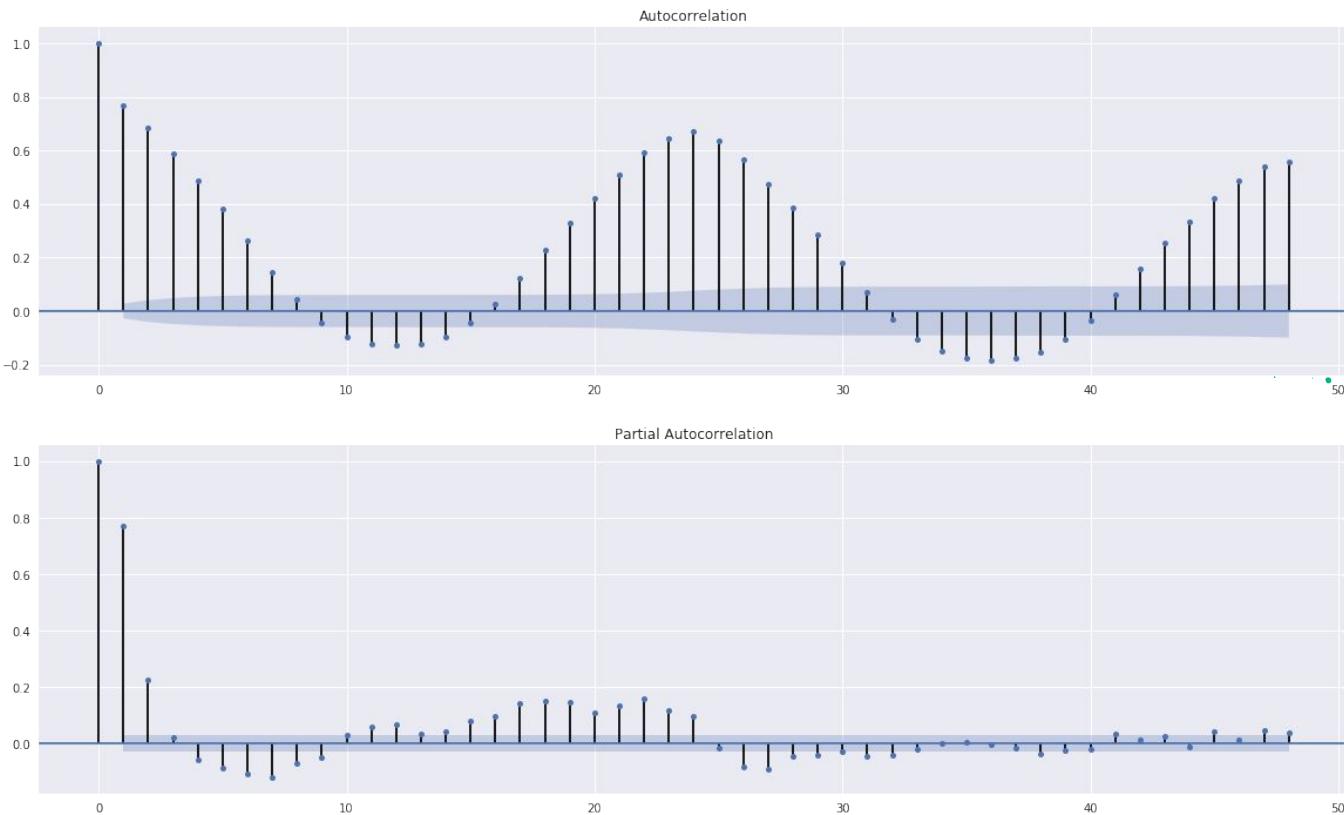
Critical Value(1%)	Critical Value(5%)	Critical Value(10%)
-3.43	-2.86	-2.56



... Stationary



ACF & PACF



ARIMA 1 week



ARIMA 1 day



LSTM





Big concept

Bring the attention of your audience over a key concept using icons or illustrations

Results

White

Is the color of milk and fresh snow, the color produced by the combination of all the colors of the visible spectrum.

Black

Is the color of coal, ebony, and of outer space. It is the darkest color, the result of the absence of or complete absorption of light.





Thanks!

Any questions?

You can find me at:



@username



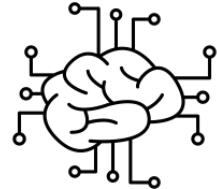
filippo@gmail.com



filippomedri



filippomedri



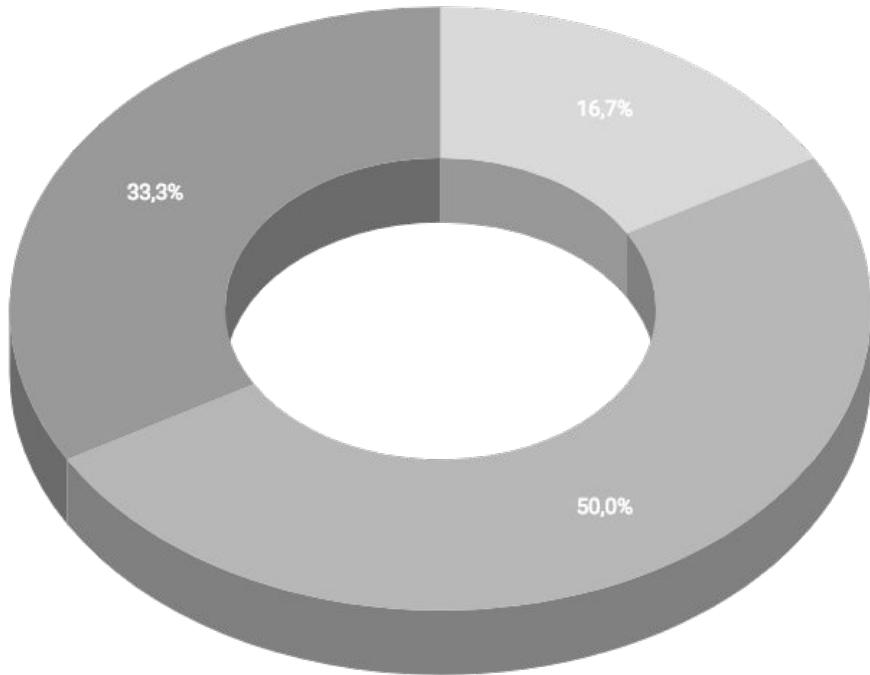
Credits

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

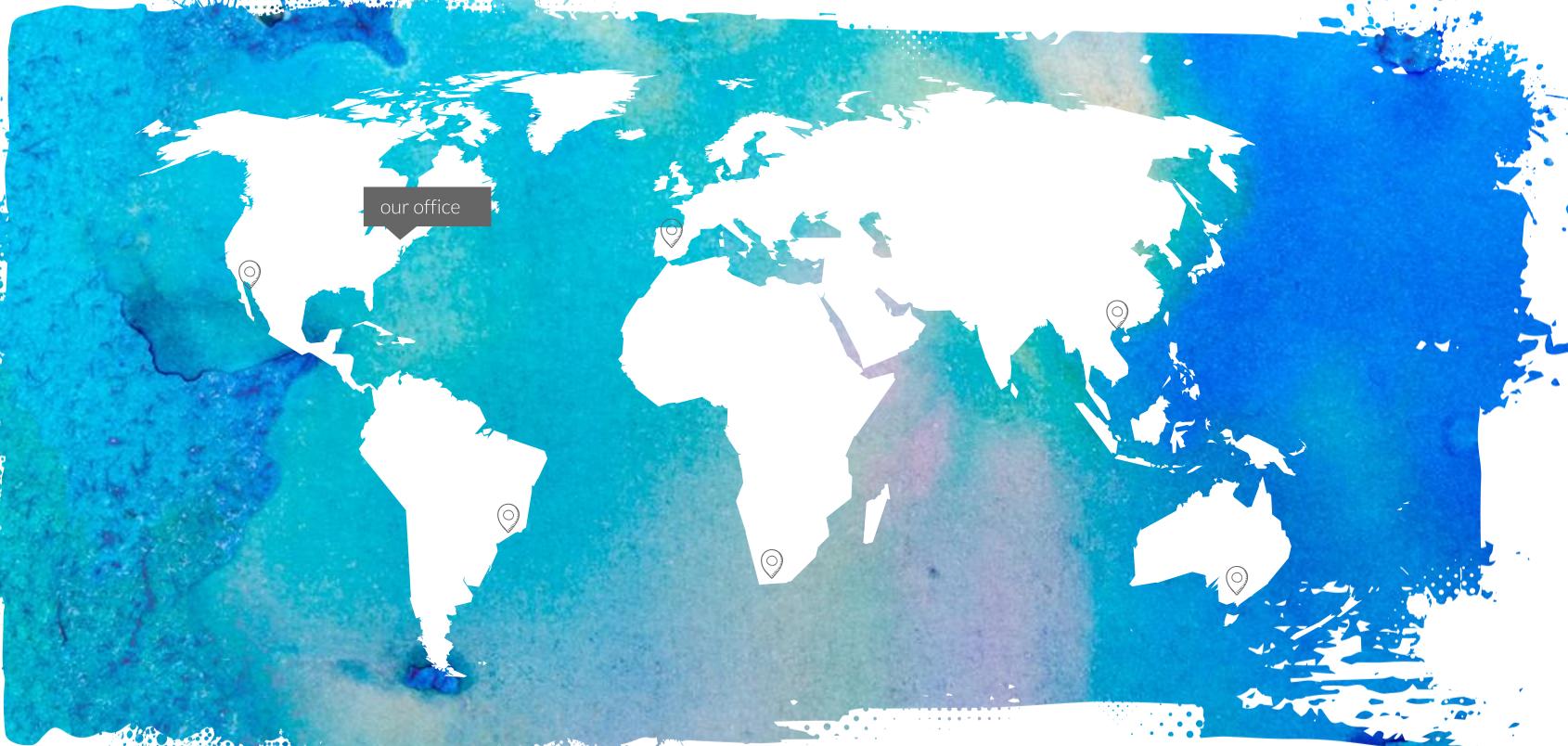
- ✗ Presentation template by [SlidesCarnival](#)
- ✗ Photographs by [Unsplash](#)
- ✗ Watercolor textures by [GraphicBurguer](#)



Appendix



Maps



You can also split your content

White

Is the color of milk and fresh snow, the color produced by the combination of all the colors of the visible spectrum.

Black

Is the color of coal, ebony, and of outer space. It is the darkest color, the result of the absence of or complete absorption of light.



In two or three columns

Yellow

Is the color of gold, butter and ripe lemons. In the spectrum of visible light, yellow is found between green and orange.

Blue

Is the colour of the clear sky and the deep sea. It is located between violet and green on the optical spectrum.

Red

Is the color of blood, and because of this it has historically been associated with sacrifice, danger and courage.

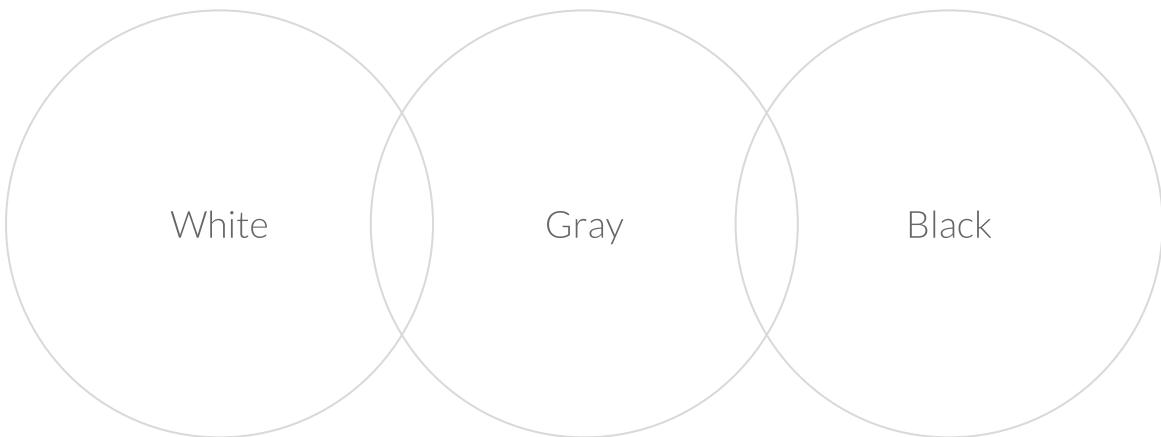


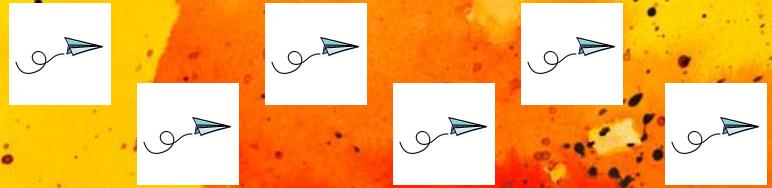
A picture is worth a thousand words

A complex idea can be conveyed with just a single still image, namely making it possible to absorb large amounts of data quickly.



Use charts to explain your ideas





1,071,840



89,526,124 \$

That's a lot of money

185,244 users

And a lot of users

100%

Total success!

Let's review some concepts

Yellow

Is the color of gold, butter and ripe lemons. In the spectrum of visible light, yellow is found between green and orange.

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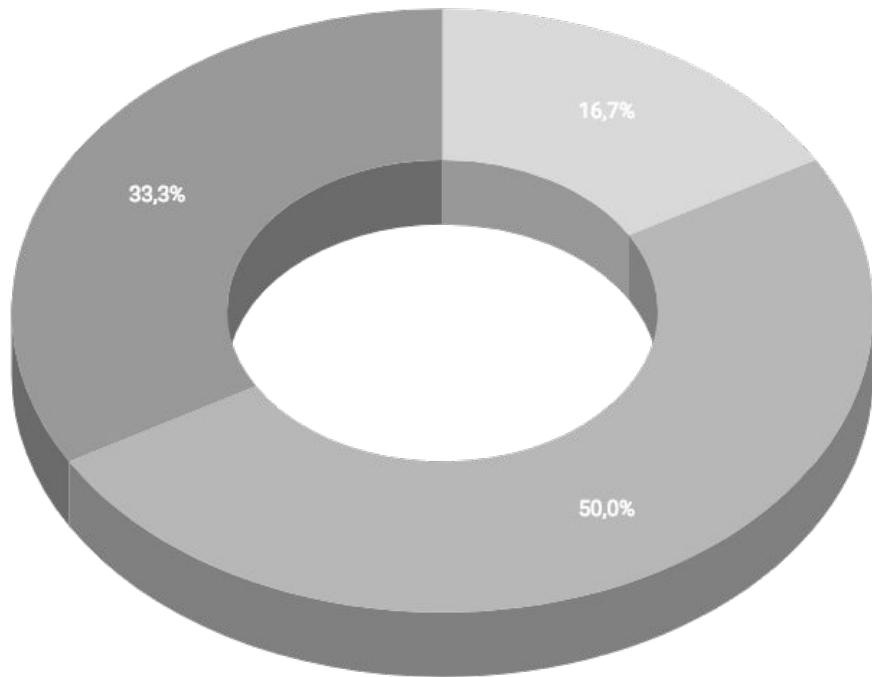
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Red

Is the color of blood, and because of this it has historically been associated with sacrifice, danger and courage.





You can insert graphs from [Google Sheets](#)



1.



Workload Prediction

... knowing the future workload will allow to
choose the size of the cpu



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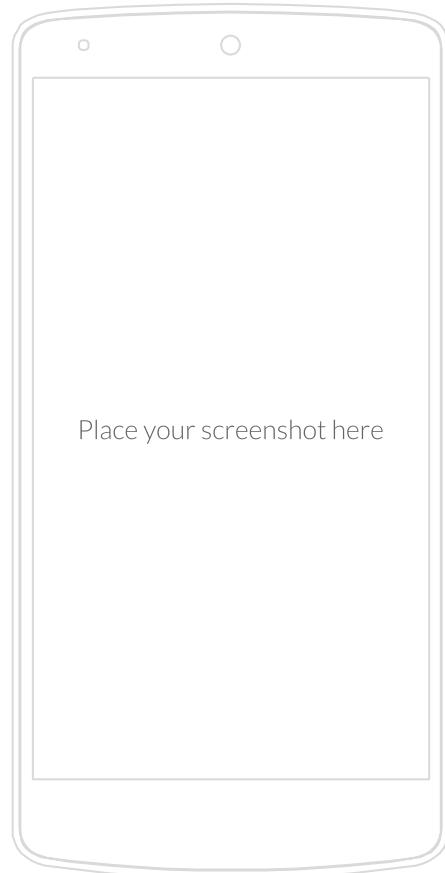
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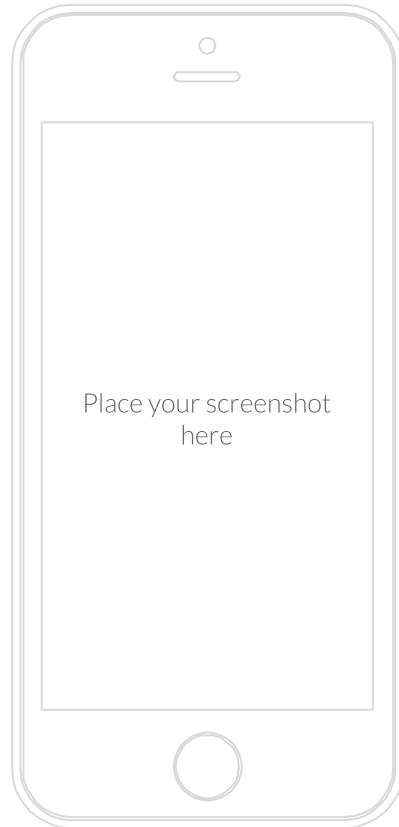




Place your screenshot here

Android project

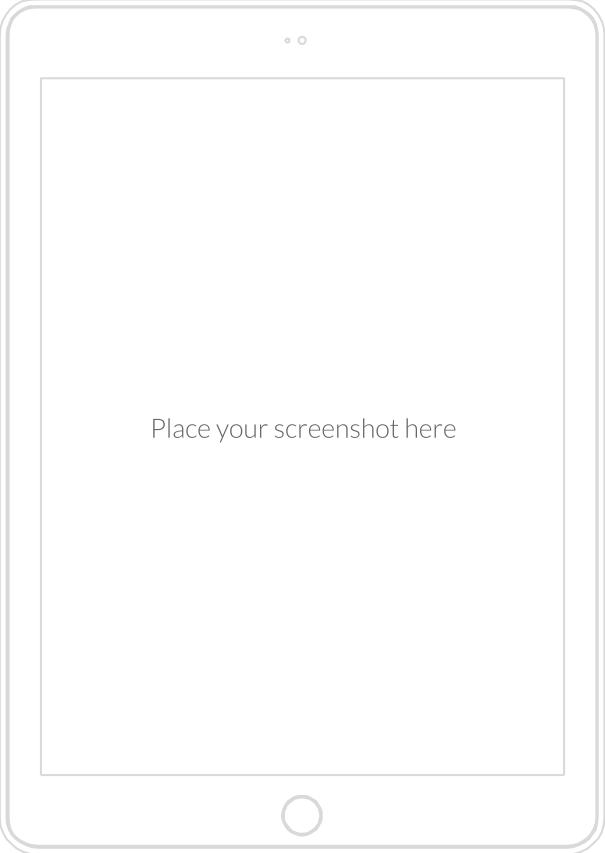
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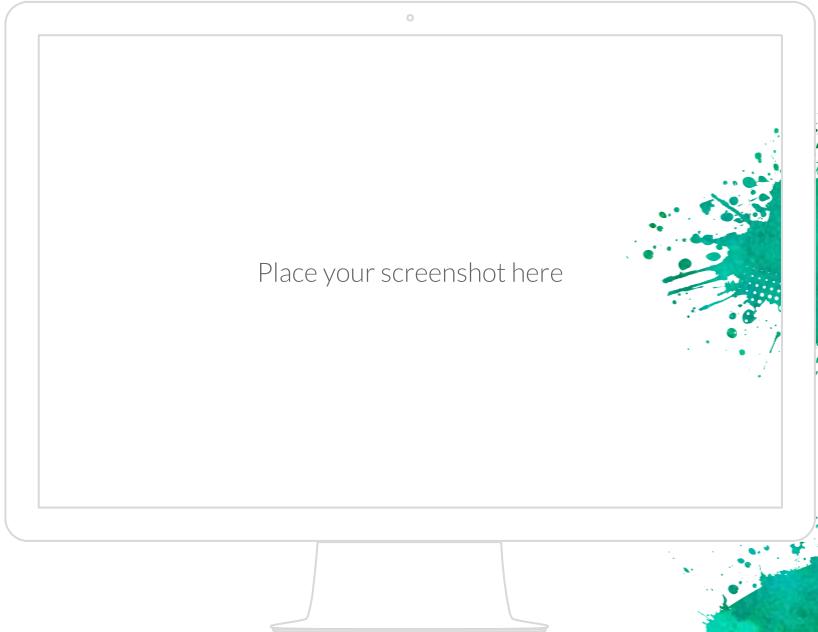
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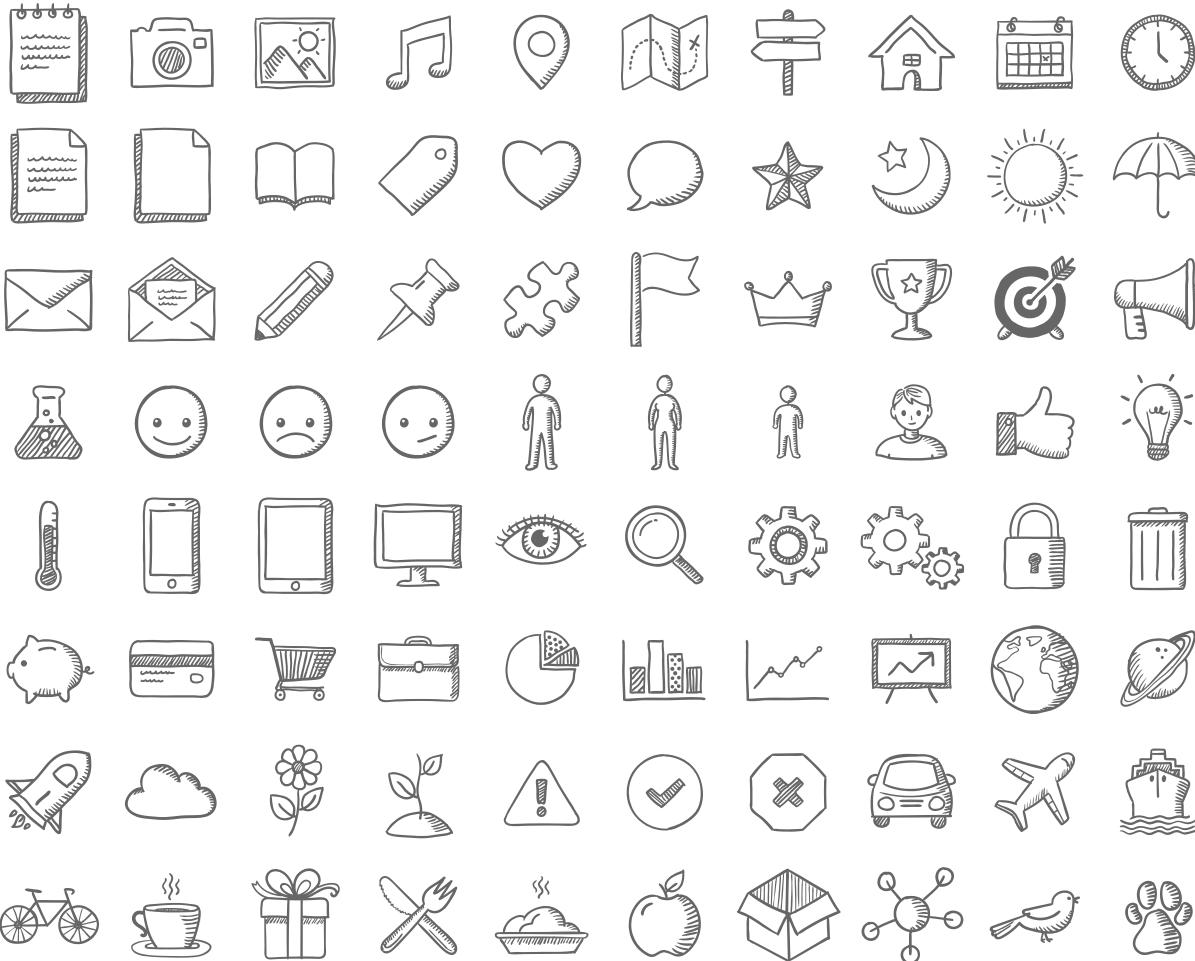
- × Titles: Lato Thin
- × Body copy: Lato Light

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This means that you can:

- Resize them without losing quality.
- Change fill color and opacity.

Isn't that nice? :)

Examples:





Now you can use any emoji as an icon!
And of course it resizes without losing quality and you can change the color.

How? Follow Google instructions

<https://twitter.com/googledocs/status/730087240156643328>



and many more...