Test Data Scientist

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Are users' average upload speed and average download speed correlated?

- Pearson Correlation Coefficient shows that average upload speed and average download speed are weekly correlated
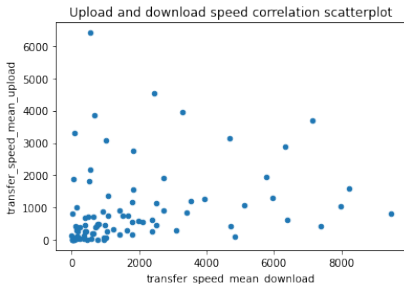
Pearson correlation coefficient
0.27

Figure: The correlation scatterplot shows the weak correlation between average upload speed and average download speed

Are users' average upload speed and average download speed correlated?

- If we only include users with at least 20 upload and download events each, Pearson correlation coefficient shows that average upload speed and average download speed are strongly correlated
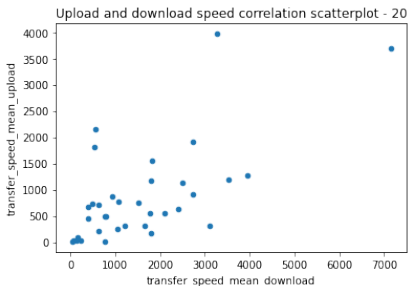
Pearson correlation coefficient
0.65

Figure: The correlation scatterplot shows the strong correlation between average upload speed and average download speed for users with at least 20 upload and download events

Are users with a storage plan of more than 100 GB more active than users with a smaller plan?

- Users with a storage plan of more than 100 GB are less active than users with a smaller plan.

$>= 100GB$ plan	$< 100GB$ plan
623 ± 1761	988 ± 2876

Table: Average number of files uploaded by users with a storage plan of more than 100 GB and by users with a storage plan of less than 100 GB

Are users with a storage plan of more than 100 GB more active than users with a smaller plan?
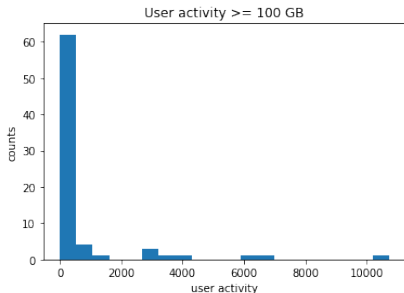

Figure: Activity distribution of users with a storage plan of more than 100 GB
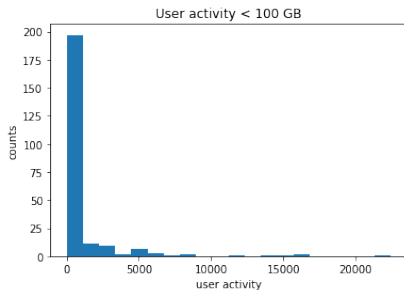

Figure: Activity distribution of users with a storage plan of less than 100 GB

Are files larger than 10MB uploaded faster than files smaller than 10MB?

- Files larger than 10MB are uploaded faster than files smaller than 10MB

speed $>= 10MB$	speed $< 10MB$
$6245 \pm 2293MB$	$748 \pm 1523MB$

Table: Average upload speed of files bigger than 10 MB and smaller than 10 MB

- On average users upload files larger than 10MB faster than files smaller than 10MB

per user average speed difference
$5626 \pm 2170MB$

Table: Average of each user upload speed difference between files bigger than 10 MB and smaller than 10 MB