

Alone Survival Analysis

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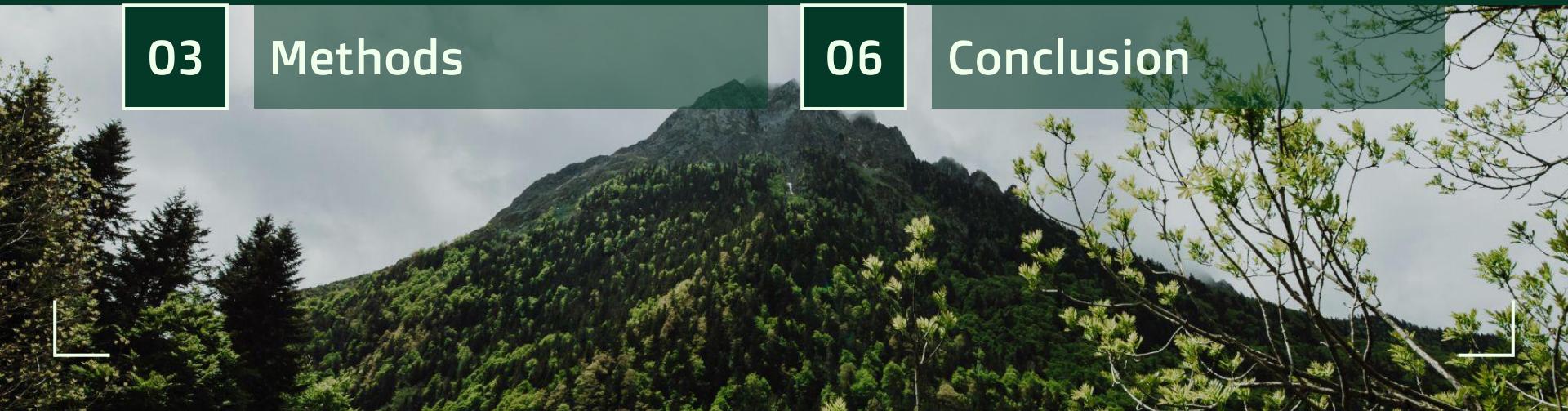
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The background image shows a lush forest of tall, dark green coniferous trees. The scene is partially obscured by a thick layer of white fog or mist, which hangs low in the air and obscures the sky. The overall atmosphere is mysterious and serene.

Introduction

Introduction



Alone

"Alone" is reality TV series that tests the limits of human survival. In this competition, individuals are dropped into remote wilderness locations, completely isolated from other contestants and the outside world. The challenge is to remain the longest in the wilderness and survive in the most unforgiving environments on Earth.



Analysis

With our dataset we aim our analysis to find any insights on how long the contestants lasted, their demographics and backgrounds.

Dataset

survivalists.csv (df_survivalists)

Details like contestants name, age, gender, profession, amount of days lasted, season they participated in and reason they quit.

loadouts.csv (df_loadouts)

A list of the 10 items each contestant is allowed to bring for their survival.

seasons.csv (df_seasons):

A list of each season, location, country, latitude, longitude and amount of contestants per season.

episodes.csv (df_episodes)

A list of each episode, the season, episode number, air date, title, a quote and its author and the ratings.

Clean & Transform of Dataframes

(df_survivalists_clean)

Details like contestants name, age, gender, profession, amount of days lasted, season they participated in and reason they quit.

(df_loadouts_clean)

A list of the 10 items each contestant is allowed to bring for their survival.

(df_armed)

Merged the cleaned survivalist dataframe with the clean loadout dataframe on name and season to make our initial analysis.

(profession_category_stats)

Mapped all of the unique professions into professional categories to find the average amount of days laster per professional category.

(analysis_df_clean)

Utilised one hot encoding to transform each item in a row into its own column to make a statistical analysis for each item the contestants took using (mean, median, standard deviation and correlation)



Methods

General

- Head
- Columns
- Count

Cleaning

- Drop na values
- Fill na
- Nunique

Transformation

- Merge
- Groupby
- Sort values



A close-up photograph of a tree trunk with dark, textured bark. Green ivy with heart-shaped leaves is growing over the trunk, some hanging down and others clinging to the surface. The lighting suggests it's daytime.

E.D.A

- Aggregation
(Mean, Median, Standard Deviation)
- Correlation
- Mapping





Questions & Data

Gender and Survival Time

Do men and women last different amounts of time on "Alone"?

Professional Background and Survival

Do people with outdoor jobs or survival training last longer on "Alone"?

Age and Survival

Does age matter to be able to survive longer on the show?

Tools for Survival

Is any given tool or item going to decide how long you last in "Alone"?



KPIs

39.04255319148936

Avg. Duration of Contestants

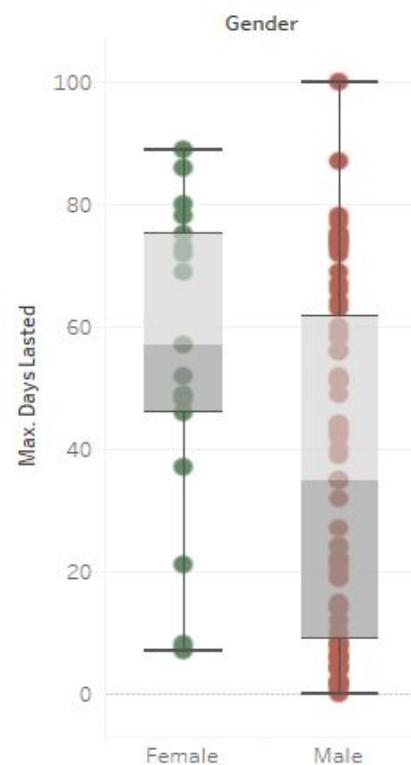
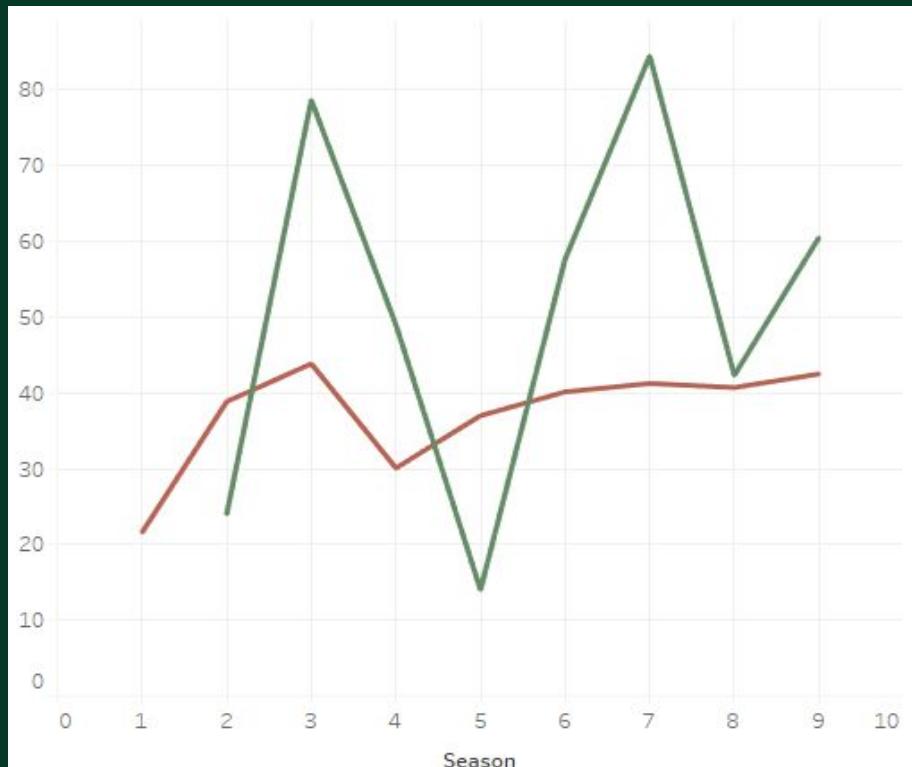
39.5

Median Duration

27.85

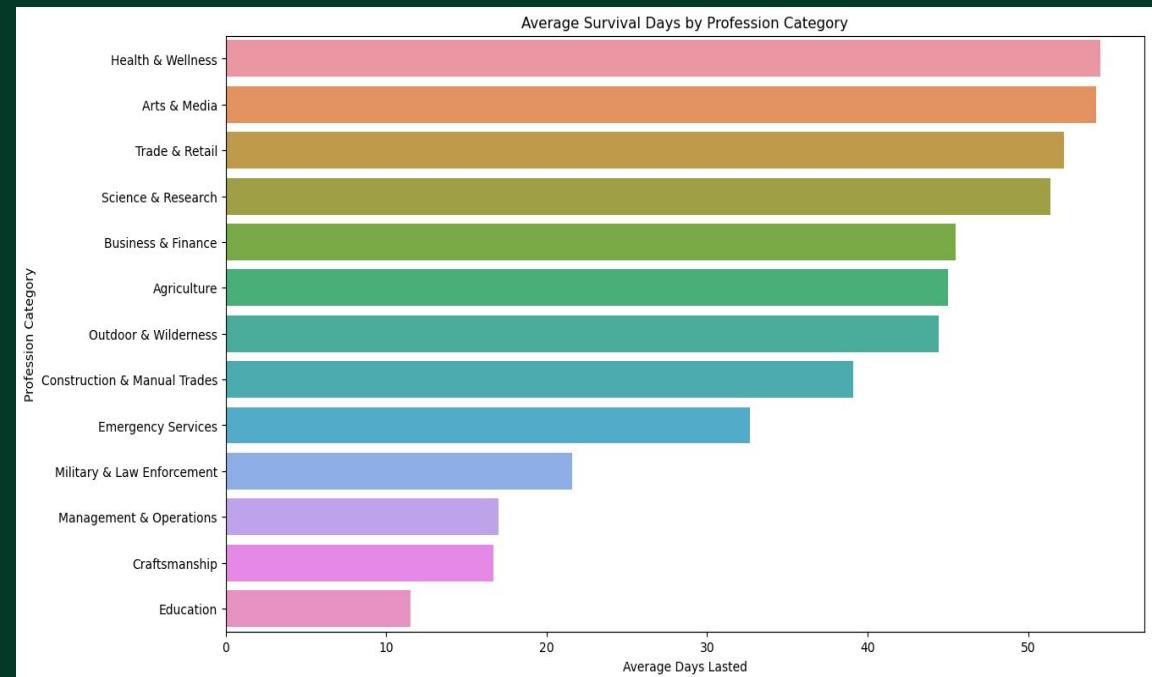
Standard Deviation of Survival Duration

Gender and Survival Time



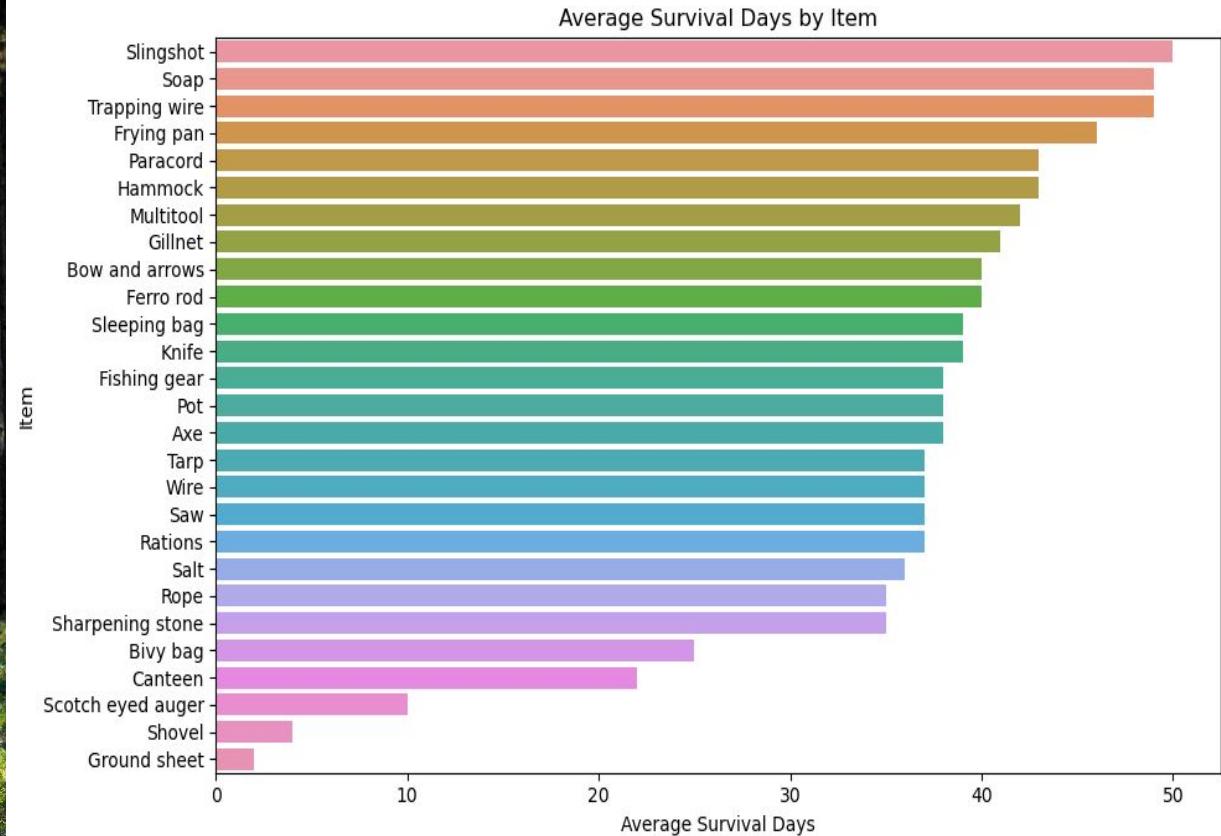


Professional Background



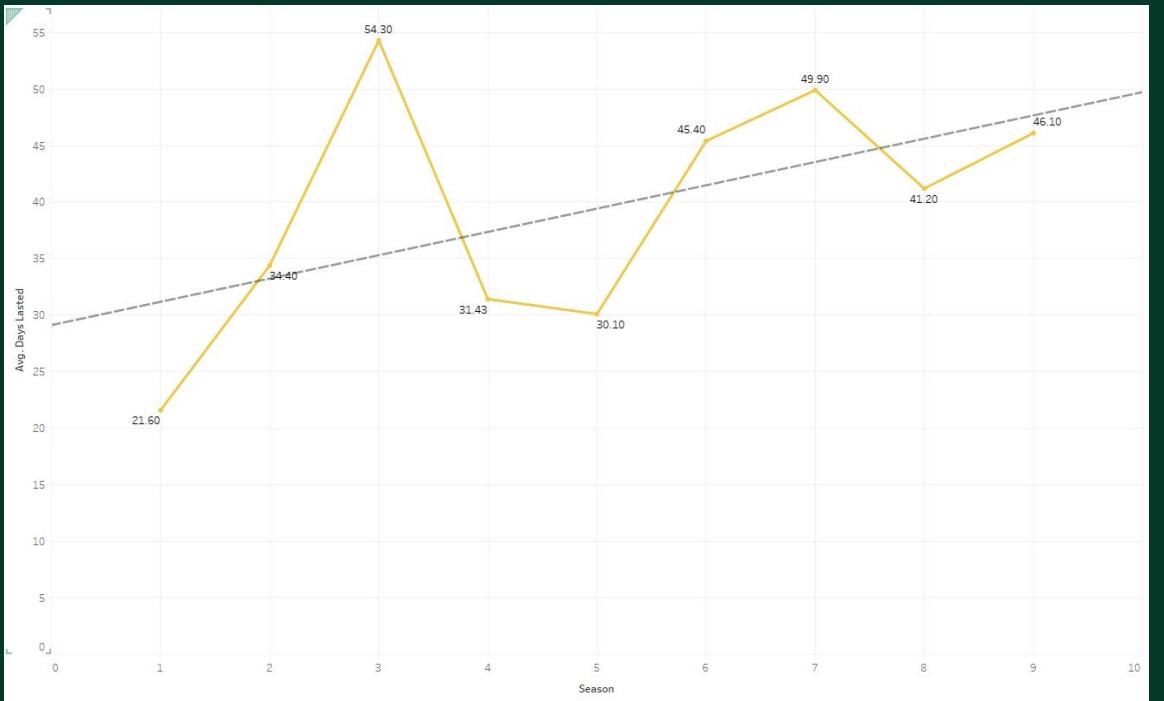
Items & Tools

	item	Mean	Median	StdDev
22	Slingshot	50.000000	55.0	39.736633
23	Soap	49.000000	49.0	0.000000
25	Trapping wire	48.652174	45.0	24.383252
6	Frying pan	45.666667	49.0	23.415095
12	Paracord	43.196429	45.0	28.900720
9	Hammock	43.000000	43.0	11.313708
11	Multitool	42.043478	41.0	27.337363
7	Gillnet	40.812500	41.5	31.091372
2	Bow and arrows	40.466667	38.5	28.264169
4	Ferro rod	39.857143	40.0	27.018860
21	Sleeping bag	38.658824	37.0	27.104539
10	Knife	38.627451	39.0	28.237536
0	Axe	38.462500	38.0	27.750673
13	Pot	38.282609	38.0	27.838753
5	Fishing gear	38.100000	38.0	27.606810
24	Tarp	37.466667	44.0	29.240658
26	Wire	37.333333	35.0	17.616280
17	Saw	36.962500	36.0	28.113893
14	Rations	36.779412	35.5	27.128135
16	Salt	36.500000	36.5	13.435029
15	Rope	35.000000	35.0	NaN
19	Sharpening stone	34.750000	25.5	39.381679
1	Bivy bag	24.625000	3.5	32.684367
3	Canteen	21.500000	6.5	27.174520
18	Scotch eyed auger	10.000000	10.0	NaN
20	Shovel	4.000000	4.0	NaN
8	Ground sheet	2.000000	2.0	2.828427





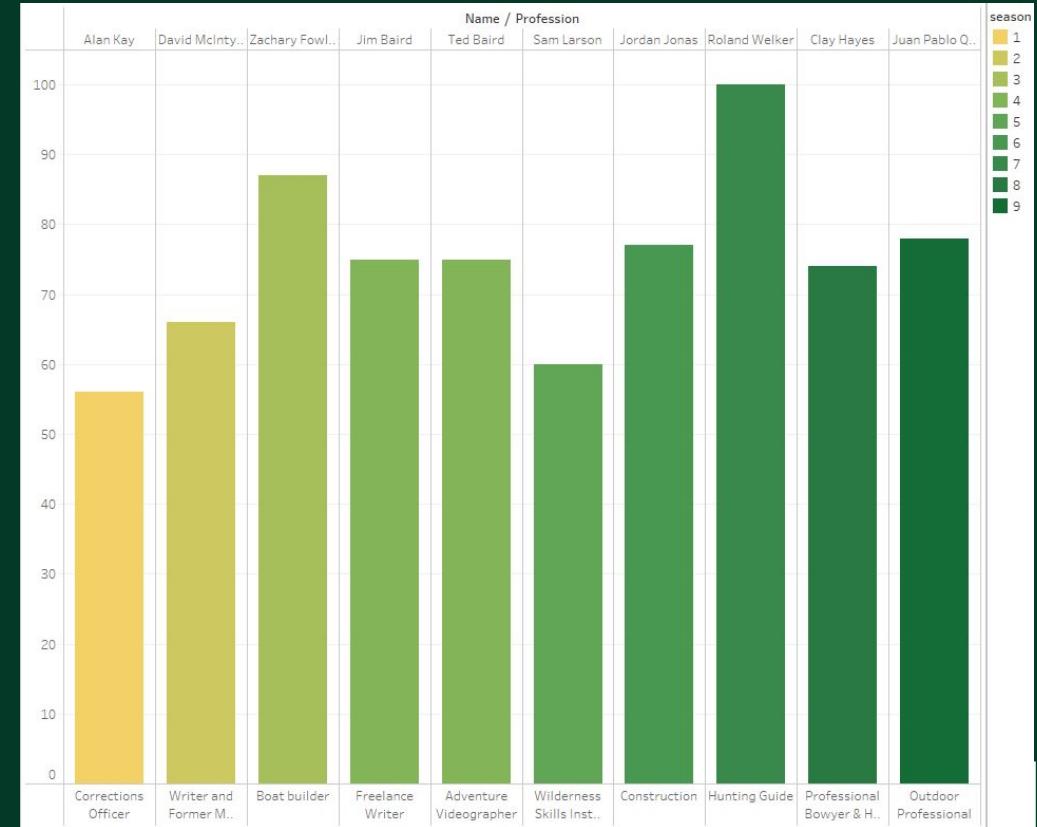
More Data...



	Item	Correlation
0	Trapping wire	0.349066
1	Paracord	0.195400
2	Multitool	0.128434
3	Slingshot	0.102418
4	Bow and arrows	0.063977
5	Gillnet	0.031388
6	Hammock	0.021064
7	Soap	0.019385
8	Wire	0.013326
9	Ferro rod	0.000643
10	Sleeping bag	-0.007331
11	Salt	-0.013533
12	Rope	-0.015133
13	Sharpening stone	-0.032669
14	Frying pan	-0.051403
15	Saw	-0.077982
16	Rations	-0.078556
17	Knife	-0.081512
18	Pot	-0.090258
19	Bivy bag	-0.104298
20	Tarp	-0.105373
21	Scotch eyed auger	-0.108718
22	Axe	-0.129667
23	Shovel	-0.131178
24	Fishing gear	-0.139553
25	Ground sheet	-0.197164
26	Canteen	-0.269836



Season Winners



The background image shows a lush, green forest of tall evergreen trees, likely Douglas firs, with their characteristic conical shapes. The forest is partially obscured by a thick layer of fog or mist, which hangs low in the air, creating a sense of depth and mystery. The lighting is soft and diffused, typical of a rainy or overcast day in a temperate rainforest.

Conclusion

Thanks!

Do you have any questions?

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<https://github.com/baonline>

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