

Website Design Ranker

Using Machine Learning

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Introduction

- Our project involves an Machine learning algorithm that uses certain parameters to rank websites in terms of their design.
- In this presentation, we will be explaining, comparing and contrasting existing works that are similar in purpose to our project.
- We will be comparing against:
 - A Website that ranks other design according to submissions by critics
 - A ranking implementation done by Google that analyses a webpage's contents
 - An algorithm called CoLiDes models how people navigate a complex website to find information

Problem

- Our main problem is to evaluate website designs using an algorithm that uses machine learning
- It must take into account various parts of the website to use as parameters.

Why "Website Design Ranker" ?

- Website Design Ranker will rank set of input websites as choice of parameter.
- It will be helpful to find best website among list of websites which have same content.

Existing Methods : Website Design Ranking Agencies

- Websites are ranked by Ranking Agencies as per submission on their database.
- Hired critics and analyzing staffs are reviewed and ranked according to their policy.
- No automated, More time consuming

Example:

<https://www.awwwards.com>

<https://www.cssdesignawards.com>

<https://www.csswinner.com/winners>

<https://thefwa.com>

Existing Methods : Google Page Layout

- Google introduced Page Layout Algorithm to analyse website readability.[1]
- Looks for the layout of the webpage and the amount of content we see in the page once we click on a result.[1]
- Focuses to reduce the difficulty of users to find the actual content.[1]
- The websites which does not have a lot of visible content above-the-fold and dedicates a large fraction (above a normal degree) to ads will be affected.[1]

Existing Methods : Google Page Layout

Good example: site layouts that highlight content

Bad example: site layout that pushes content below the fold



Figure: One of the criteria of GPL Algorithm^[Fig:1]

Problem Analysis

What we proposed?

- We propose a system where an algorithm scrubs through a website, looking for various elements.
- Once we discover the nature of these elements, we check whether the parameters we have set (eg: colour, symmetry, etc) have been met.
- For each parameter met, a website will obtain a mark.
- Once all parameters have been checked, the website receives an overall score (the sum of all marks) that ranks its design.

Conclusion

- Here we can see the logical differences in the approaches that our algorithm takes versus any existing methods.

References

- 1 - Google Page Layout Algorithm: Everything You Need to Know "<https://www.searchenginejournal.com/google-algorithm-history/page-layout/close>"