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 web-page's contents

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.
- There are no existing algorithms or methods that manage to analyze and evaluate websites in this way.

Why "Website Design Ranker" ?

- Website Design Ranker will rank set of input websites based on certain parameters.
- It will be helpful to find best website among list of websites which have same content.
- We can compare our website design with other competing websites.
- We can see how a website's design may improve in an area.

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.

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 analyze website readability.[1]
- Looks for the layout of the web page 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

content below the fold _ _

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

Bad example: site layout that pushes

Existing Methods : CoLiDes models

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 receieves 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/googlealgorithm-history/page-layout/close"
- $\label{eq:fig:1} Fig: 1 https://cdn.searchenginejournal.com/wp-content/uploads/2017/10/google-algorithm-above-the-fold-380 \times 238.png$