Resume Filtering

Project Proposal

Team Members:

Yamuna Bollepalli Saisri Teja Pepeti Saikiran Yedulla Blessy Kuriakose

Goals and Objectives

Motivation:

Algorithm based resume filtering is already in use on the side of the company, but having an analytical one available to the public makes it possible for candidates to evaluate their own resume or curriculum vitae (CV) before using it to apply for a job.

On the side of the employer, a program like this gives an additional tool to do resume screening involving keyword tagging and targeted extraction of details relevant to the hiring process. It provides a way to quickly and efficiently go through resumes and tune in to the ones that match set criterias. Companies can find a suitable hire and candidates with good skill can find their dream role in the company.

Significance:

Having an algorithm do a pre-analysis of candidates saves time and energy by bringing the most qualified of the batch to the forefront for review. Keyword tagging helps even non-technical resource managers have an idea of what they are looking at by breaking down jargon to more common layman terms or buzzwords. Our implementation aims to have tagging using a self-made dictionary for the field of artificial intelligence, however other fields can make their own dictionary to utilize for the model implementation.

Candidates can likewise use it to evaluate their own resume and how it appears from a third (machine) perspective. A readily available method to screen their own resume can help those with less knowledge on the workforce side of their education (such as new graduates) get an idea of the credentials a company might be looking for, while also gaining insight on what kind of roles they might be more qualified for.

Objectives:

Using this process we will be able to retrieve the required content from a particular resume by splitting and scanning all the resumes in the dataset. We will be using Spacy and the stemming process to achieve this. Then training the model and try to check for the critical words, then we will try to tag those words to which field they belong too. Visualizing the model for detailed understanding, creating a specific dictionary on our own in the initial process but later trying to implement the automated one.

Features:

- Extracting the key words from the resume.
- Matching the keywords with dictionary values for tagging.
- Keeping a count of the number of times a key is mentioned (by its related value pairs).
- Visualize the count of keys.
- Extracting details such as years of experience.

Project lifecycle:



Figure 1: Project Lifecycle.

References

Resume Dataset | Kaggle

spaCy NLP | Definition | Introduction | How to create? (educba.com)

Introducing the Deep Learning Virtual Machine on Azure

Github links:

https://github.com/trela47/Resume-Filtering nlp-project (Blessy K.)

Kiran3295/NLP project (github.com) (Saikiran Y.)

https://github.com/Saisriteia12/NLPProject.git (Sai Sriteja P.)

https://github.com/Ybg99/NLP Proj.git (Yamuna B.)

Page 3 of 3 Rev. 10/7/22