

Concordia University Department of Computer Science & Software Engineering

COMP 6841: Software Project Management

Powered Resume Builder

GROUP 22

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Github URL: https://github.com/saloni213/SOEN6841-Project

1. Problem Identification

Title: Comprehensive Problem Identification Report

Objective: This report aims to meticulously dissect the multifaceted challenges faced by job seekers and employers in the resume-building process, demonstrating the critical need for an innovative software solution to address these challenges effectively.

Content:

Introduction:

In the contemporary landscape of employment, the creation of a compelling and tailored resume stands as a pivotal gateway for job seekers to secure coveted positions in their desired fields. However, the traditional approach to resume building often proves to be a labyrinthine endeavor fraught with challenges, hindering both job seekers' prospects and employers' recruitment efforts. Recognizing the critical need to revolutionize this process, we embark on the development of the Powered Resume Builder, a sophisticated software solution poised to redefine the paradigm of resume creation.

Problem/Opportunity Statement:

The traditional method of crafting resumes presents a myriad of challenges for job seekers, ranging from deciphering complex job requirements to tailoring resumes effectively for specific job descriptions. Job seekers frequently encounter obstacles such as identifying relevant keywords, structuring resumes cohesively, and articulating their qualifications and experiences in a compelling manner. Consequently, resumes may fail to capture the attention of recruiters, impeding job seekers' progression in the hiring process.

Example 1:

Consider a recent college graduate aspiring to secure an entry-level position in marketing. Despite possessing relevant coursework and internship experiences, the graduate may struggle to articulate their qualifications effectively in their resume. They may find it challenging to highlight their skills in digital marketing, content creation, and social media management in a manner that resonates with potential employers, resulting in missed opportunities for job interviews.

Similarly, employers face their own set of challenges in the resume screening process, grappling with the overwhelming task of reviewing a voluminous stack of resumes for

each job opening. The absence of standardized formats and inconsistency in resume quality further compound these challenges, making it labor-intensive for employers to identify suitable candidates efficiently.

Example 2:

Imagine an HR manager responsible for hiring a marketing coordinator for a rapidly growing startup. With hundreds of resumes flooding in for the job posting, the HR manager faces the daunting task of sifting through resumes to identify candidates with the requisite skills and experiences. However, the lack of standardized formats and inconsistent quality make this process cumbersome and time-consuming, delaying the recruitment process and hindering the company's growth objectives.

Significance:

In today's fiercely competitive job market, the quality of a resume plays a pivotal role in determining a candidate's success in securing interviews and job offers. A well-crafted resume tailored to the specific requirements of a job not only increases the likelihood of capturing recruiters' attention but also expedites the hiring process for employers. Conversely, a poorly constructed resume that fails to highlight relevant qualifications and experiences may impede job seekers' prospects, leading to missed opportunities and increased recruitment costs for employers.

Stakeholder Analysis:

Job Seekers:

- *Interests:* Job seekers are primarily concerned with creating resumes that effectively showcase their qualifications and experiences, thereby increasing their chances of securing employment opportunities.
- Concerns: However, many job seekers grapple with challenges such as deciphering job requirements, tailoring resumes to specific job descriptions, and formatting resumes professionally.

Employers:

- Interests: Employers aim to identify qualified candidates efficiently and cost-effectively, minimizing the time and resources expended on the recruitment process.
- Concerns: The sheer volume of resumes received for each job posting, coupled with the absence of standardized formats and inconsistent quality, poses significant challenges for employers in promptly identifying suitable candidates.

Relevance to Software Solution:

The challenges outlined in the Problem Identification report underscore the critical need for an innovative software solution like the Powered Resume Builder. By addressing these challenges, the software can significantly enhance the efficiency and effectiveness of the resume-building process for both job seekers and employers. Below are the key points highlighting the relevance of the identified challenges to the Powered Resume Builder:

1. Tailored Resumes for Specific Job Descriptions:

Challenge: Job seekers often struggle to tailor their resumes effectively to match the requirements of specific job descriptions. This challenge arises from the need to identify relevant keywords, skills, and experiences sought by employers in each job posting.

Relevance to Software Solution: The Powered Resume Builder utilizes advanced Al algorithms to analyze job descriptions and user input, enabling the generation of meticulously tailored resumes aligned with specific job requisites. By automating the process of content customization, the software ensures that resumes accurately reflect the qualifications and experiences desired by employers, increasing job seekers' chances of securing interviews and job offers.

2. Time-Intensive Resume Creation Process:

Challenge: The traditional method of crafting resumes is often labor-intensive and time-consuming, requiring job seekers to invest significant time and effort in researching job requirements, structuring resumes, and formatting content.

Relevance to Software Solution: The Powered Resume Builder streamlines the resume-building process by automating repetitive tasks and providing users with intuitive tools and templates. By expediting the creation of professional resumes, the software conserves users' valuable time and effort, allowing them to focus on other aspects of their job search endeavors.

3. Inefficient Resume Screening Process for Employers:

Challenge: Employers face challenges in efficiently screening a large volume of resumes received for each job posting. The absence of standardized formats and inconsistent resume quality further complicates the screening process, delaying candidate identification and selection.

Relevance to Software Solution: The Powered Resume Builder equips employers with tools to streamline the resume screening process effectively. By generating standardized and well-structured resumes optimized for ATS, the software

enables employers to identify qualified candidates efficiently. Additionally, features such as keyword matching and content analysis facilitate targeted resume screening, saving employers time and resources in the recruitment process.

4. Need for Personalized and Professional Resumes:

Challenge: Job seekers aspire to create resumes that not only highlight their qualifications and experiences but also stand out to potential employers as professional and polished documents.

Relevance to Software Solution: The Powered Resume Builder offers users access to a wide range of customizable templates, design options, and formatting features. By leveraging AI technology, the software provides personalized content suggestions and real-time editing assistance, ensuring that resumes are tailored to individual preferences and industry standards. This personalized approach enhances the professionalism and visual appeal of resumes, making them more compelling to recruiters and hiring managers.

5. Alignment with Industry Trends and Needs:

Challenge: The evolving landscape of recruitment and employment necessitates innovative solutions that align with emerging industry trends and cater to the evolving needs of job seekers and employers.

Relevance to Software Solution: The Powered Resume Builder stays abreast of industry trends and user feedback, continuously refining its features and functionalities to meet the dynamic needs of the job market. By incorporating the latest advancements in AI, NLP, and user experience design, the software remains at the forefront of resume-building innovation, providing users with cutting-edge tools to succeed in their job search endeavors.

By addressing these challenges through innovative features and functionalities, the Powered Resume Builder software solution emerges as a transformative tool that empowers job seekers and employers alike in navigating the complexities of the modern recruitment landscape.

2. Market Analysis

Title: Comprehensive Market Analysis Report

Objective: This report endeavors to provide an exhaustive analysis of the market landscape for resume-building tools, encompassing elements such as the target audience, potential users, competitors, and business values of the Powered Resume Builder software solution.

Content:

Introduction:

In this section, we embark on an intricate analysis of the market dynamics surrounding resume-building tools, delving into key facets such as target audience demographics, emerging trends, and competitive landscape. By gaining a profound understanding of the market environment, we can strategically position the Powered Resume Builder software solution to cater to the evolving needs of our target users and distinguish ourselves from competitors.

Target Audience Identification:

The primary target audience for the Powered Resume Builder comprises job seekers spanning diverse industries and career levels, actively seeking employment opportunities. These individuals exhibit a penchant for technology and seek innovative solutions to streamline their job search endeavors, including the creation and customization of resumes.

Demographic and Psychographic Characteristics:

- Age: The target audience encompasses individuals ranging from recent graduates embarking on their professional journey to seasoned professionals seeking career advancement opportunities.
- Education: The audience boasts a spectrum of educational backgrounds, spanning from high school graduates to individuals with advanced degrees.
- Tech-Savvy Individuals: Our target audience exhibits proficiency in utilizing technology and is inclined towards adopting innovative tools to enhance their job search experience.

Competitor Analysis:

Online Resume Builders:

- Strengths: Esteemed online platforms boasting user-friendly interfaces, offering rudimentary resume-building functionalities.
- Weaknesses: Limited customization options, absence of AI integration for personalized resume generation.
- Opportunities: Integration of AI and NLP technologies to augment resume personalization and efficacy.
- *Threats:* Potential disruption from emerging Al-driven resume-building solutions offering advanced features and capabilities.

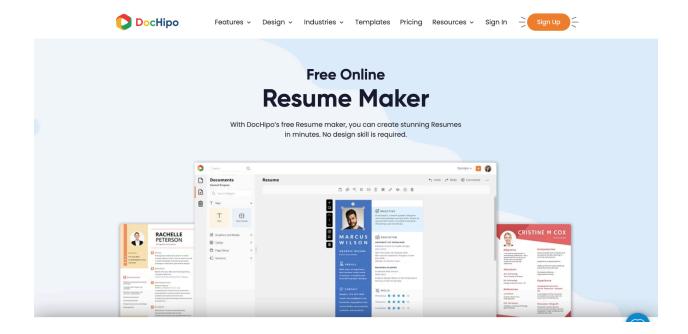
Traditional Resume Services:

- Strengths: Personalized assistance from proficient resume writers, tailored to individual specifications and preferences.
- *Weaknesses:* Elevated costs relative to online resume builders, protracted turnaround times, reliance on manual processes.
- Opportunities: Hybrid models amalgamating human expertise with Al technology to furnish personalized and cost-effective resume-building solutions.
- *Threats:* Disruption from innovative Al-powered resume builders furnishing commensurate quality at a fraction of the cost.

Existing Al-Powered Resume Builders:

1. DocHipo - Website

DocHipo offers an Al-driven resume building platform that assists users in creating professional resumes tailored to specific job descriptions. The tool utilizes advanced algorithms to analyze job requirements and user input, suggesting relevant content, keywords, and formatting options. DocHipo's Al capabilities enable users to generate resumes optimized for applicant tracking systems (ATS), increasing the likelihood of their resumes getting noticed by employers.



2. Zety Resume Builder - Website

Zety Resume Builder combines AI technology with intuitive design features to streamline the resume creation process. The platform offers a wide range of customizable templates and prompts users to input their job-related information. Leveraging AI algorithms, Zety suggests improvements in content, formatting, and language to create professional-looking resumes tailored to the user's preferences and the specific job requirements.

ResumeTrick - Website

ResumeTrick employs Al-powered algorithms to analyze job descriptions and user input, facilitating the creation of targeted resumes. The platform provides personalized recommendations for content optimization, including relevant skills, experiences, and achievements. Additionally, ResumeTrick offers real-time feedback on resume quality and ATS compatibility, ensuring that users' resumes meet industry standards and stand out to potential employers.

4. Resume-Now - Website

Resume-Now utilizes Al-driven technology to assist users in crafting professional resumes tailored to their career goals. The platform offers a comprehensive suite of features, including customizable templates, pre-written content suggestions, and real-time editing assistance. With its Al-powered resume builder, Resume-Now empowers users to create polished resumes that effectively showcase their skills and experiences to prospective employers.

5. MyPerfectResume - Website

MyPerfectResume leverages AI technology to provide users with personalized resume-building experiences. The platform offers an extensive library of templates and design options, allowing users to customize their resumes according to their preferences. MyPerfectResume's AI capabilities analyze job descriptions and user input to generate tailored content suggestions, ensuring that resumes align with specific job requirements and industry standards.

6. VisualCV - Website

VisualCV offers an Al-driven resume builder that enables users to create visually appealing and impactful resumes. The platform provides customizable templates, drag-and-drop editing tools, and real-time collaboration features. Using Al algorithms, VisualCV suggests relevant keywords, phrases, and design elements to optimize resumes for ATS and impress potential employers. Additionally, VisualCV offers analytics tools to track resume performance and engagement metrics.

7. Resume-Library - Website

Resume-Library incorporates AI technology into its resume-building platform to assist users in creating professional resumes tailored to specific job roles. The platform offers a vast database of job descriptions and industry-specific keywords, which are analyzed by AI algorithms to generate customized content suggestions for resumes. Resume-Library's AI-powered resume builder helps users highlight their skills and experiences effectively, increasing their chances of success in the job market.

8. Jobscan - Website

Jobscan utilizes Al-driven algorithms to optimize resumes for ATS and improve their compatibility with job descriptions. The platform offers a resume analysis tool that compares users' resumes against job postings, identifying areas for improvement and suggesting relevant keywords. Jobscan's Al technology helps users tailor their resumes to specific job requirements, increasing their visibility to recruiters and improving their chances of landing interviews.

9. Rezi Al Resume Builder - Website

Rezi Al Resume Builder leverages artificial intelligence to analyze job descriptions and user input, generating tailored resumes optimized for ATS. The platform offers customizable templates, content suggestions, and formatting options to help users create professional resumes quickly and efficiently. Rezi's

Al technology ensures that users' resumes are well-structured, keyword-rich, and aligned with industry standards, enhancing their competitiveness in the job market.

10. Skillroads - Website

Skillroads employs Al-powered algorithms to assist users in creating personalized resumes that resonate with employers. The platform offers a user-friendly interface and a wide selection of templates to choose from. Skillroads' Al technology analyzes job descriptions and user input to provide customized content recommendations, ensuring that resumes highlight relevant skills, experiences, and achievements effectively.

11. Enhancy - Website

Enhancy combines AI technology with intuitive design features to help users create visually stunning and impactful resumes. The platform offers customizable templates, real-time editing tools, and personalized content suggestions. Using AI algorithms, Enhancy analyzes job descriptions and user input to optimize resumes for ATS and impress potential employers. Additionally, Enhancy provides analytics tools to track resume performance and engagement metrics.

12. Hiration - Website

Hiration offers an Al-powered resume builder that assists users in crafting tailored resumes optimized for specific job roles. The platform provides customizable templates, content suggestions, and formatting options to streamline the resume creation process. Hiration's Al technology analyzes job descriptions and user input to generate keyword-rich content, ensuring that resumes stand out to recruiters and ATS.

These Al-powered resume builders leverage advanced algorithms and technologies to streamline the resume creation process, optimize resumes for ATS, and enhance users' competitiveness in the job market. Each platform offers unique features and functionalities tailored to meet the diverse needs of job seekers.

Feature Comparison

		Zety			MyPerfe				Rezi Al			
			Resum	Resum	ctResum		Resume	Jobsc		Skillroa		
Feature	DocHipo	Builder	eTrick	e-Now	е	alCV	-Library	an	Builder	ds	Enhancv	Hiration
Al-driven technology	✓	>	√	1	>	1	>	>	>	1	1	✓
Analyzes job descriptions	1	√	>	1	√	1	√	>	√	1	1	1
User input analysis	1	✓	√	1	1	1	✓	✓	√	1	1	1
Suggestions for content	1	V	1	1	√	1	√.	✓	1	1	1	1
Optimizes resumes for ATS	1	✓	√	1	✓	1		√	✓	1	1	1
Customizable templates		✓		1	1	1			✓	1	1	1
Real-time editing assistance				1	1	1						
Analytics tools						1					1	
Drag-and-drop editing tools						1						
Personalized recommendations			√		√					1		
Tracks resume performance												

Business Values:

The Powered Resume Builder software solution presents several unique selling propositions that set it apart from competitors and confer added value to users:

- Al-Powered Personalization: Advanced Al algorithms scrutinize job descriptions and user input to generate meticulously tailored resumes aligning with specific job requisites.
- Time Efficiency: The software expedites the resume-building process, conserving users' valuable time and effort vis-a-vis manual methodologies.
- User-Friendly Interface: An intuitive and user-friendly interface caters to users across varied technical competencies, ensuring a seamless and gratifying user experience.

Value Proposition:

The Powered Resume Builder confers job seekers a competitive edge in the contemporary job market by furnishing them with Al-optimized resumes adept at accentuating their qualifications and experiences. By leveraging cutting-edge technologies to tailor resumes to precise job specifications, the software amplifies users' prospects of securing interviews and job offers, ultimately enhancing their career trajectory and success.

Google Searches for Al Resume Builders (US)

The 20 most popular search terms for AI resume builders were analyzed. US figures were used⁽⁵⁾.

Search Term	Searches Per Month (US)
resume ai	9000
ai resume builder	6200
ai resume writer	1300
ai resume	900
resume ai builder	900
resume ai wonsulting	300
resume builder ai	700
kick resume ai	600
ai resume writing	600
ree ai resume builder	500
ai resume generator	500
wonsulting resume ai	400
ai resume review	350

resume ai by wonsulting	350
pest ai resume builder	350
ai resume builder free	350
resume ai free	300
ai generated resume	250
resume writer ai	250
resume writing ai	250
Total	24,850

Searches for Al Resume Builders in 2023: Regional Analysis⁽⁵⁾

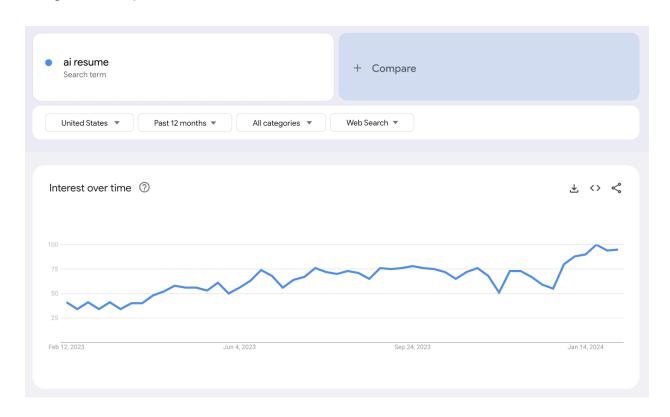
Region	Search Intensity (Scale of 100)
District of Columbia	100
California	56
Texas, New Jersey, Georgia, Washington	52
Virginia, Massachusetts	49
Colorado, Utah	47
New Mexico	46
Illinois	45
Florida	44
Arizona, Maryland, New York	43
Oregon	41
Nevada	40
Minnesota, Connecticut, North Carolina	39
Michigan	38
ldaho	36
South Carolina	35
Pennsylvania	34
Alabama	33
Ohio	32
Indiana, Missouri	30
Kentucky	29

New Hampshire	28
Tennessee, Kansas	27
Mississippi, Wisconsin	25
Oklahoma	24
Nebraska	23
Arkansas	20
Louisiana	19
lowa	16

Searches for Al Resume Builders in 2023: Popularity Increase Analysis⁽⁵⁾

Data gathered using Google Trends.

Google Trends provides normalized data on a scale of 100.



Searches for Al Resume Builders in 2023: Popularity Increase Analysis (canada):



Reference:

- "Al Revolutionizes the Job Search: Almost 50,000 Job Seekers Used Al for Resume and Cover Letter Writing in March." Accessed: Feb. 11, 2024. [Online]. Available: https://kickresume.prowly.com/238451-ai-revolutionizes-the-job-search-almost-5000
 0-job-seekers-used-ai-for-resume-and-cover-letter-writing-in-march
- 2. P. S. Tan, "Development of interactive resume / Tan Phaik See," undergraduates, Universiti Malaya, 2005. Accessed: Feb. 11, 2024. [Online]. Available: http://studentsrepo.um.edu.my/13004/
- 3. "Free Online Resume Maker | Create a Perfect Resume in 5 Minutes," Dochipo. Accessed: Feb. 11, 2024. [Online]. Available: https://www.dochipo.com/resume-maker/
- 4. R. Tyagi, "Resume Builder Application," *International Journal for Research in Applied Science and Engineering Technology*, vol. 8, pp. 14–18, May 2020, doi: 10.22214/ijraset.2020.5003.
- 5. "Searches For Al Resume Builders Increase 567 Percent." Accessed: Feb. 11, 2024. [Online]. Available: https://www.valuewalk.com/searches-for-ai-resume-builders-increase-567-percent/
- 6. I. Wu, K. Wayne, S. Lakka, and T. Rai, "Pro-Resume: The Infographic Resume Builder".
- 7. A. Mulla, A. Khare, K. Agrawal, and A. Naik, "Resume Builder Application with Automated Job Prediction," pp. 128–134, 2023, doi: 10.48047/nq.2023.21.01.NQ20008.
- 8. A. M. Ahmed A. Sharma, D. Sharma, F., "Résumé builder over rejuvenated Al features in website development," in *Smart Computing*, CRC Press, 2021.
- 9. T. B. Khaled, "Web-Application on CV-Building".
- 10. "Web-based resume builder system for university students".