

VISVESVARAYA TECHNOLOGICAL UNIVERSITY  
"Jnana Saugama", Belagavi-560014, Karnataka



A PROJECT REPORT ON

**"PREDICTION OF JOB BASED ON PROFILE"**

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE  
AWARD OF THE DEGREE

BACHELOR OF ENGINEERING  
IN  
COMPUTER SCIENCE & ENGINEERING

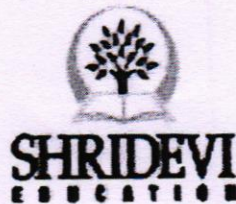
Submitted

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Under the guidance of

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**SHRIDEVI INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
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2021-22



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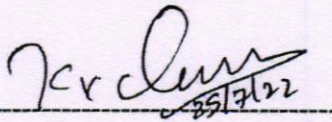
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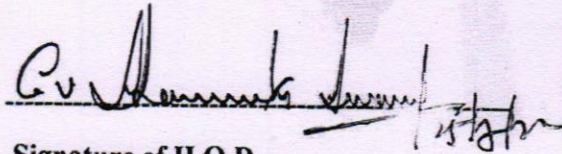
**CERTIFICATE**

This is to certify that, the project entitled "PREDICTION OF JOB BASED ON PROFILE" has been successfully carried out by Amulya J M [ISV18CS003],Thungashree [ISV18CS043], Chaitra M S [ISV17CS011], Raghuram G K [ISV17CS034] in partial fulfillment for the award of Bachelor of Engineering in Computer Science & Engineering of the Visveswaraaya Technological University, Belagavi during the academic year 2021-22. It is certified that all the corrections/suggestions indicated for internal assessments have been incorporated in the report. The project report has been approved as it certifies the academic requirements in respect of Project work-□ prescribed for the Bachelor of Engineering Degree.



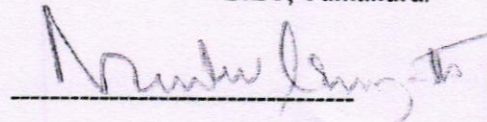
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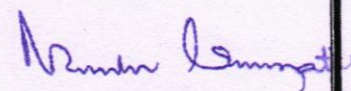
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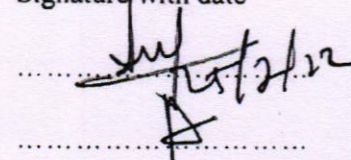
  
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Name of the Examiners

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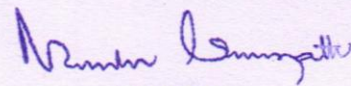
2. RENUKARADHYA... P. C.

Signature with date



## Abstract

The rise of digital communication and the spread of the internet has made an enormous impact in every industry. One such domain is the Hiring process, where a job seeker applies to a job by creating a profile on a job portal by providing all his/her work preferences. These work preferences of each user can be collected from each user and provide job recommendations based on their preference. There had been work done in this field, where researchers have implemented Recsys using the Hybrid filtering method as user data had previous interaction with item (Rafter *et al.*, 2000). In this dissertation, we have approached the problem with the three-tier approach design. Data acquired for our study has no previous interaction between the user data and Job listing data. With such a dataset, we have addressed the issue of cold start from both User and Job perspective. Also, recommend the top-n job to the user by analyzing and measuring similarity between the user preference and explicit features of job listing using Content-based filtering, which is devised in support of natural language processing and cosine similarity. The Recommender System is then evaluated using precision, recall, and F1 score (Barrón-Cedeno *et al.*, 2009). The top-n recommendation made to the user is presented in the third tier of the design, a web app deployed in the local server. The presentation layer web-app is developed using Plotly's dash web framework.



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