



# **NRI INSTITUTE OF TECHNOLOGY**

(An Autonomous Institution, Approved by AICTE, Permanently Affiliated to JNTUK, Kakinada)

Accredited by NBA (CSE, ECE & EEE), Accredited by NAAC with 'A' Grade ISO

9001: 2015 Certified Institution

Pothavarappadu (V), (Via) Nunna, Agiripalli (M), Krishna Dist., PIN: 521212, A.P, India.

## **RESUME ANALYSIS AND CANDIDATE RANKING SYSTEM**

### **ABSTRACT**

In the contemporary job market, the task of screening resumes and identifying suitable candidates for specific job roles can be time-consuming and labor-intensive. To address this challenge, we propose an Automated Resume Screening and Candidate Ranking System. This system leverages natural language processing (NLP) and machine learning techniques to analyze job descriptions and candidate resumes, extract relevant keywords and features, and rank candidates based on their suitability for the given job role.

The primary objective of our project is to streamline the recruitment process by automating the initial screening of resumes and identifying top candidates efficiently. By automating these tasks, we aim to save time for recruiters and hiring managers, reduce human bias, and improve the overall efficiency of the recruitment process.

The system is built using the Flask framework in Python, allowing for easy deployment and integration with web-based interfaces. Upon receiving a zip file containing resumes and a job description PDF file, the system extracts text data from these files and preprocesses it using techniques such as tokenization and TF-IDF vectorization. The job description and resumes are then analyzed to extract relevant keywords and features.

The Automated Resume Screening and Candidate Ranking System offers a powerful solution to the challenges associated with manual resume screening. By automating the initial screening process and providing recruiters with a ranked list of candidates, the system enables more efficient and informed decision-making in the recruitment process.

### **PROJECT ASSOCIATES**

**S. V. MADHAVA REDDY (20KN1A4255)**

**R. MOUNIKESWARI (21KN5A4205)**

**T. SANDEEP (20KN1A4260)**

**K. CHANDRASEKHAR (20KN1A4223)**

### **UNDER THE ESTEEMED**

#### **GUIDANCE OF**

**Dr S. SREEDHAR BABU**