

# Mapping Opportunities in the Data Job Market

Chloe Ho, Data Analytics '24; Jacob Choudhri, Data Analytics '24

## 01. Introduction

### Motivation:

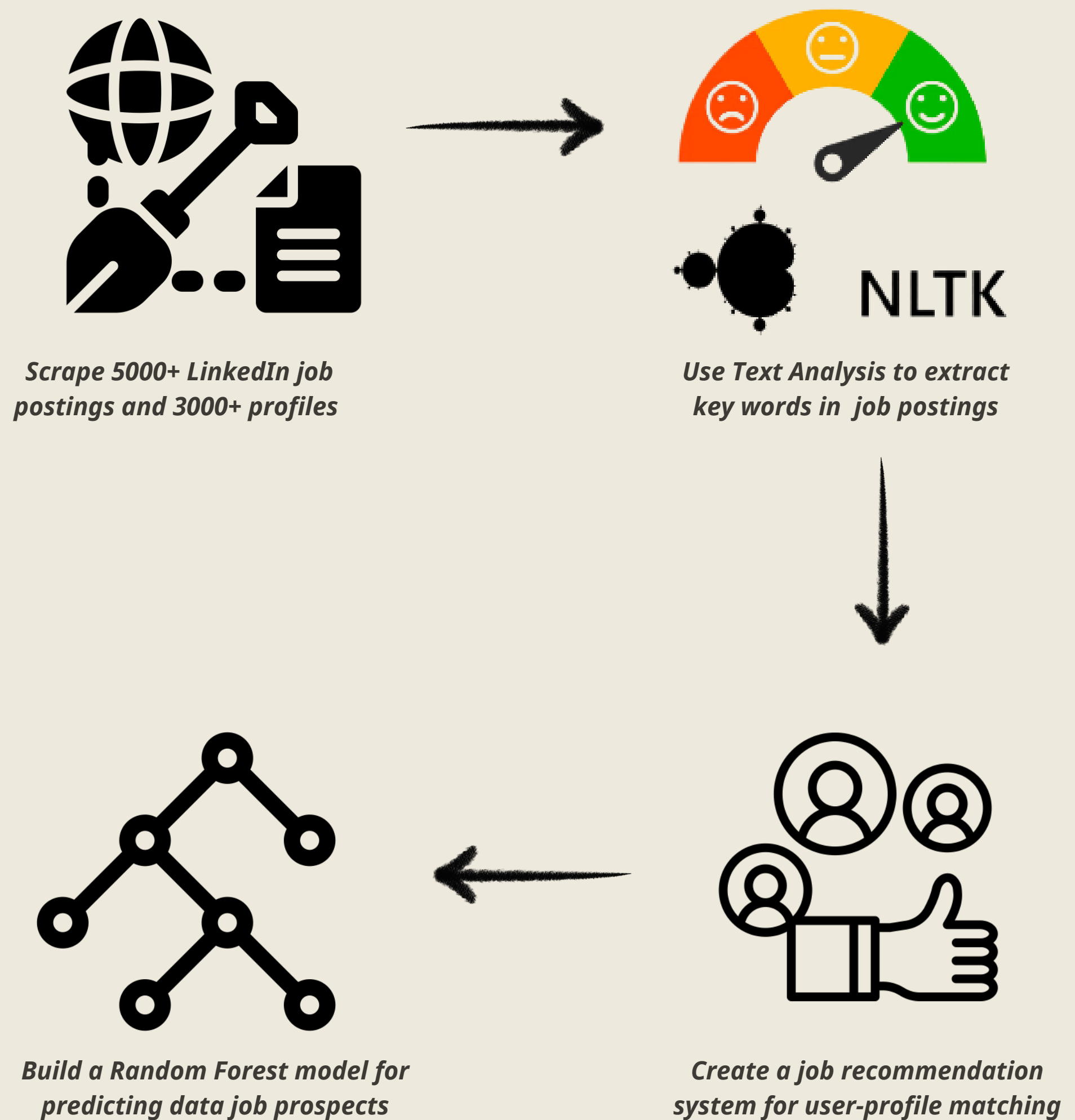
In today's data-driven world, the demand for skilled professionals in data-centric roles is increasing. This project aims to provide valuable insights into the trends, requirements, and prospects within this domain. By analyzing job postings and LinkedIn profiles, we seek to uncover patterns, skills in demand, and factors influencing job opportunities in the data field.

### Objective:

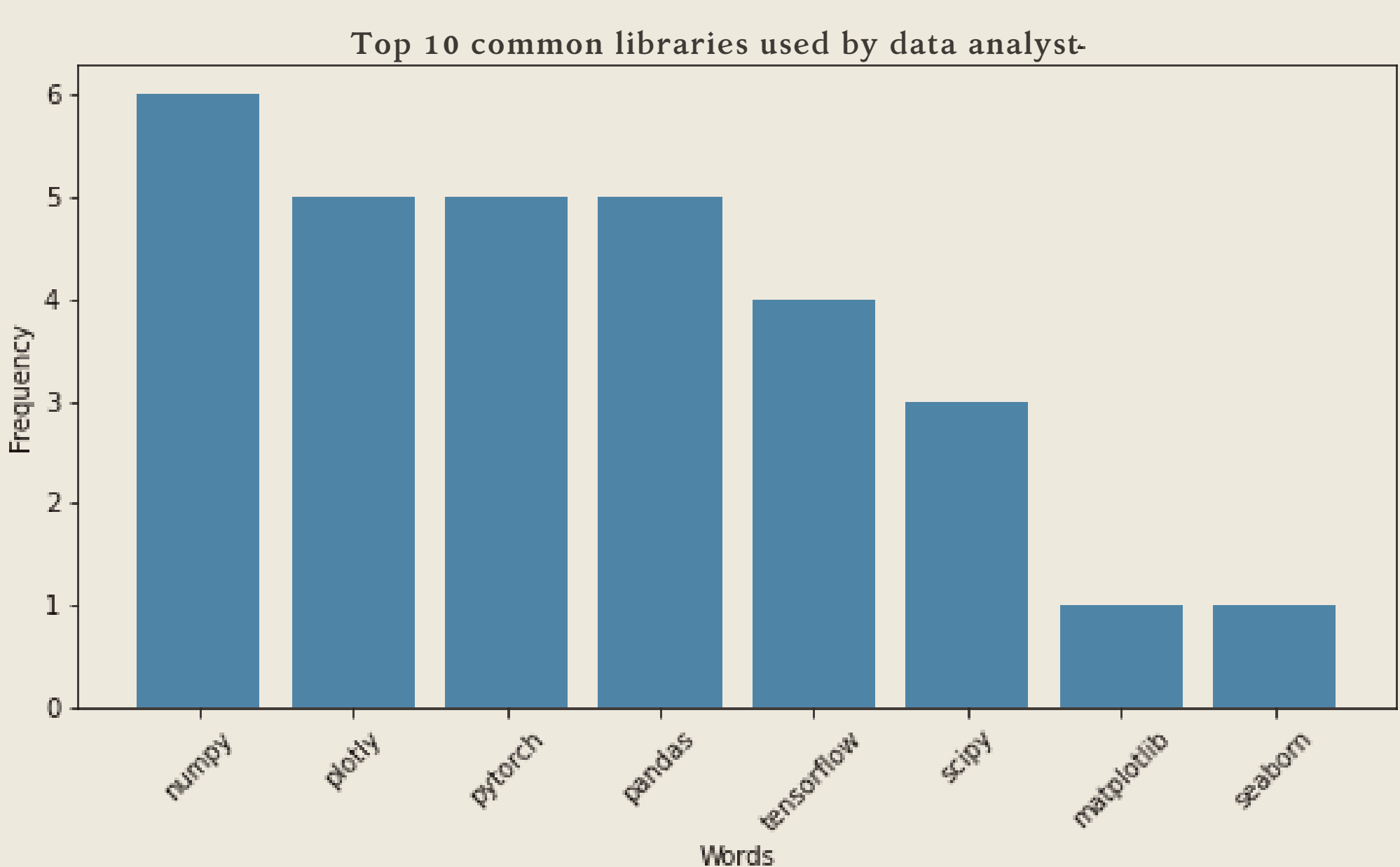
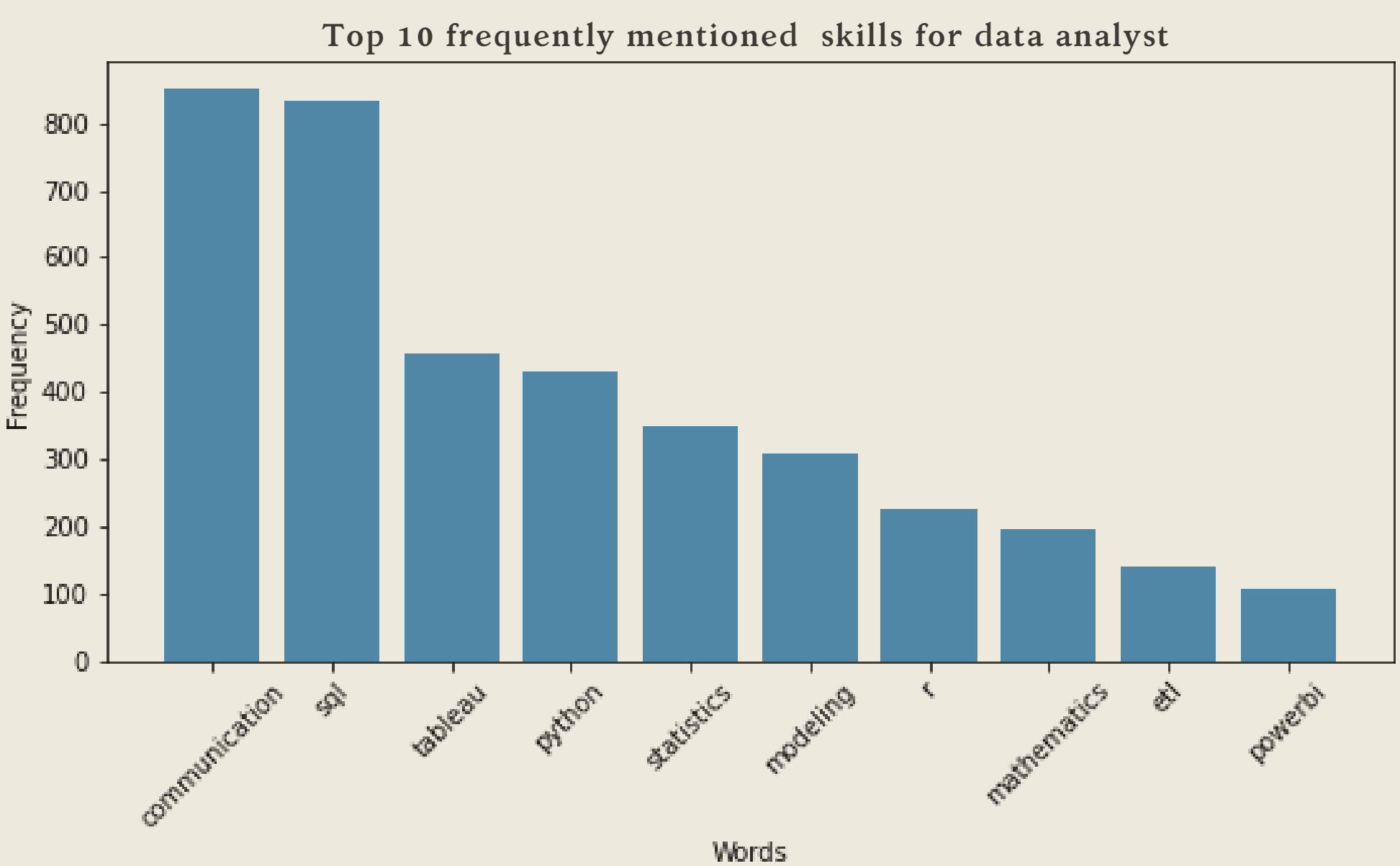
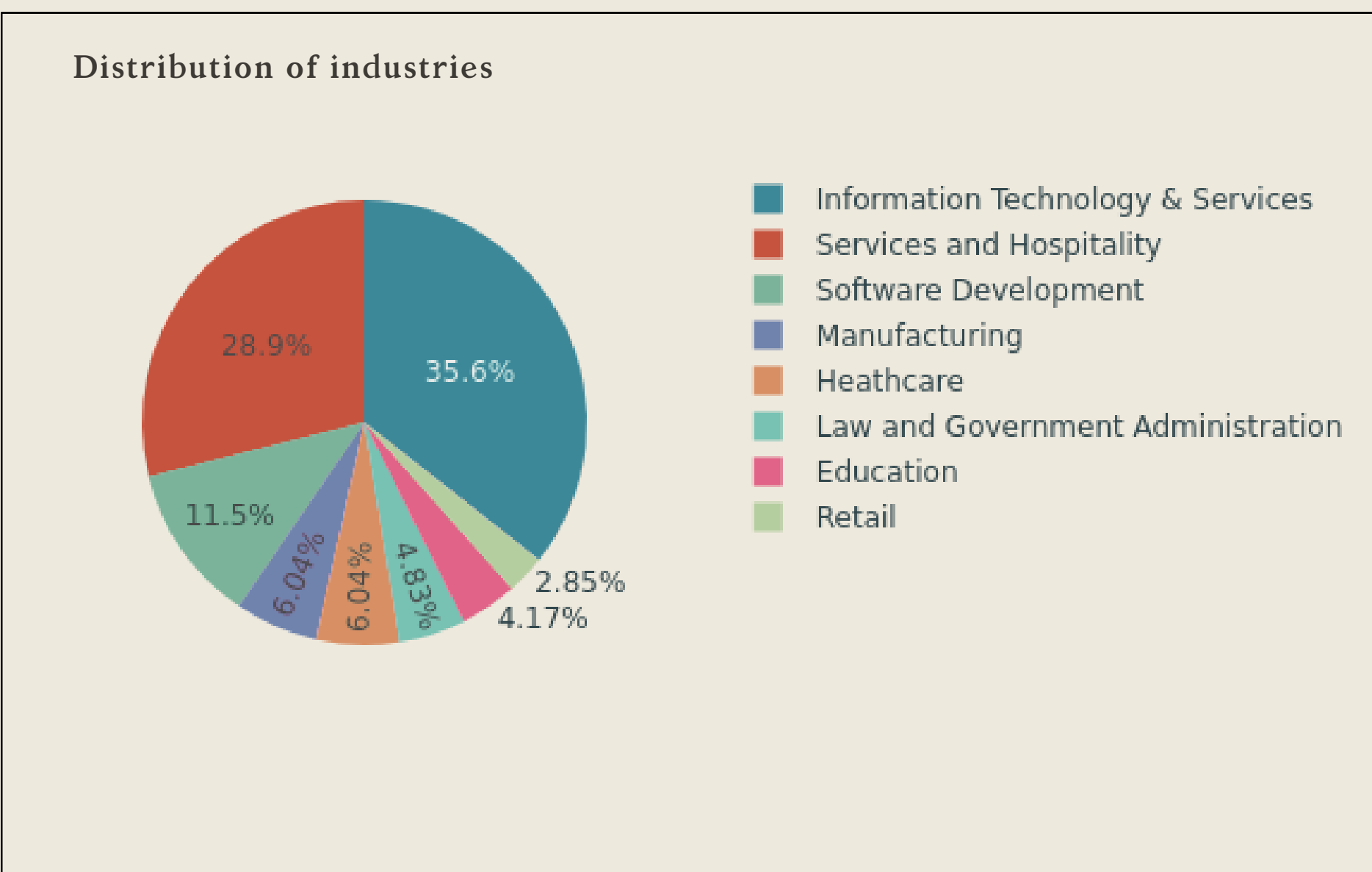
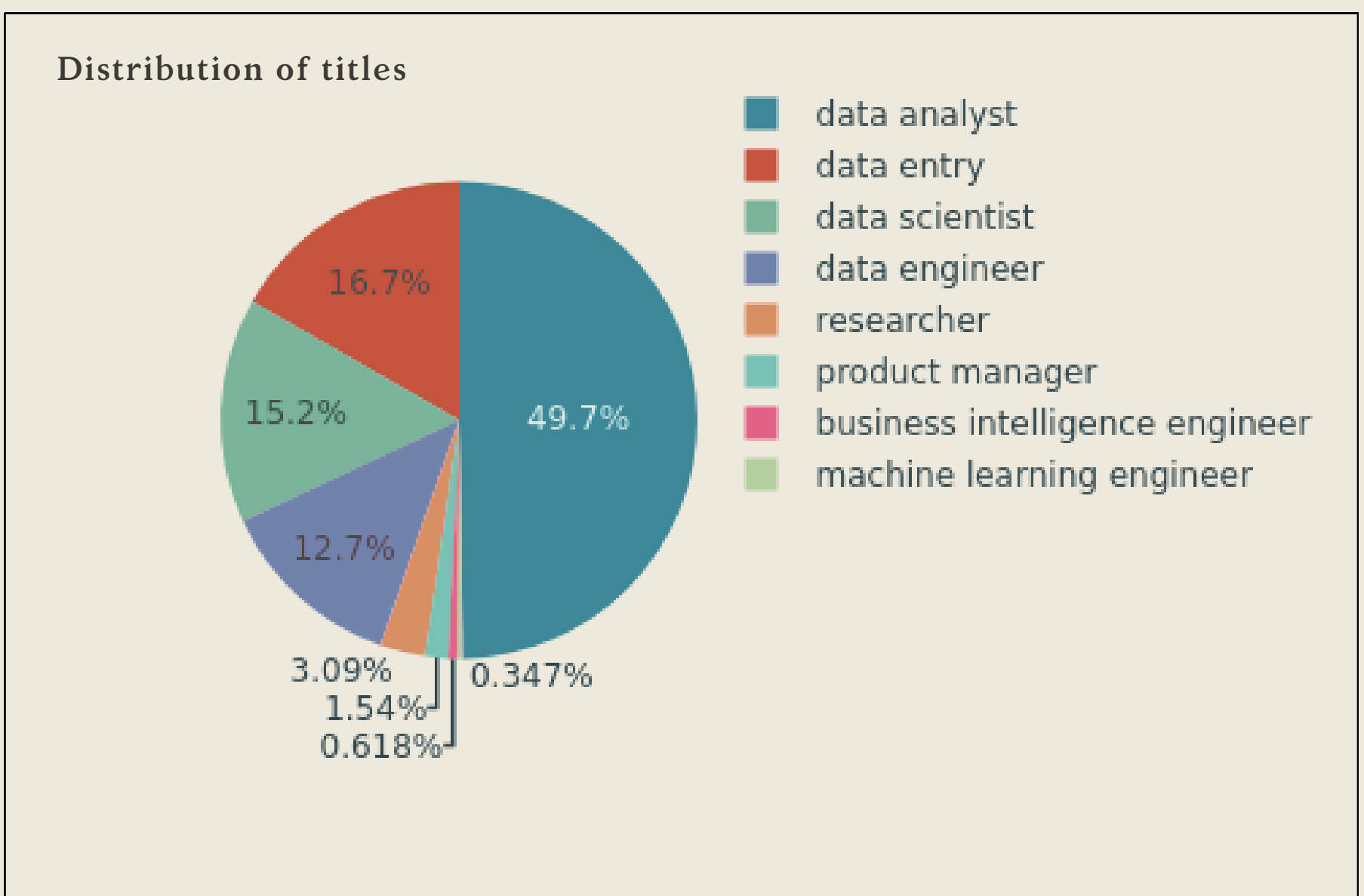
Our objective is to analyze job postings and LinkedIn profiles to provide actionable insights for job seekers, employers, and educators. We aim to identify prevalent job titles, skill requirements, and industry trends. Additionally, we endeavor to assist educators in offering courses or workshops that focus on the knowledge and skills in demand, ensuring alignment with industry needs.

## 02. Methodology

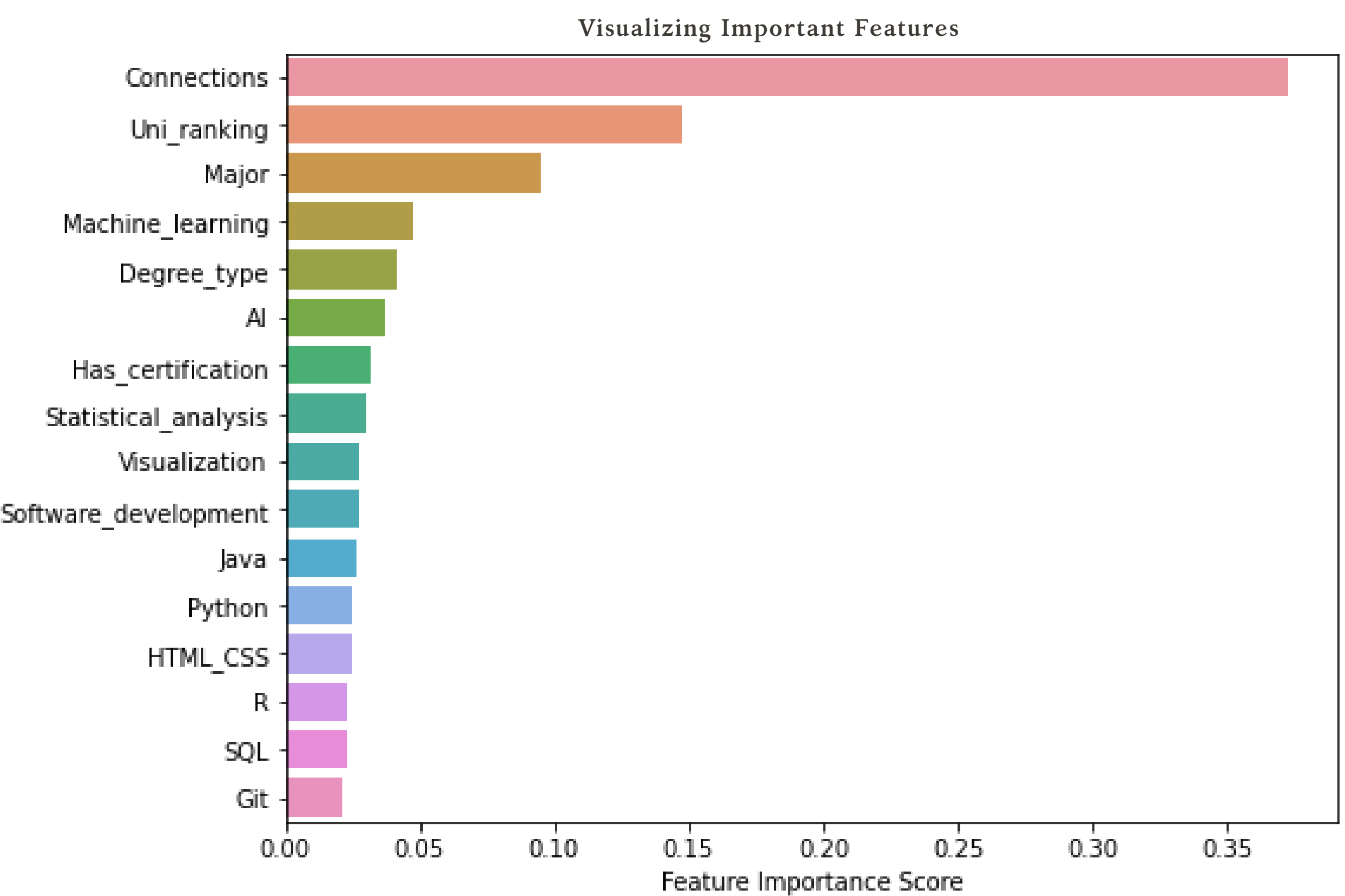
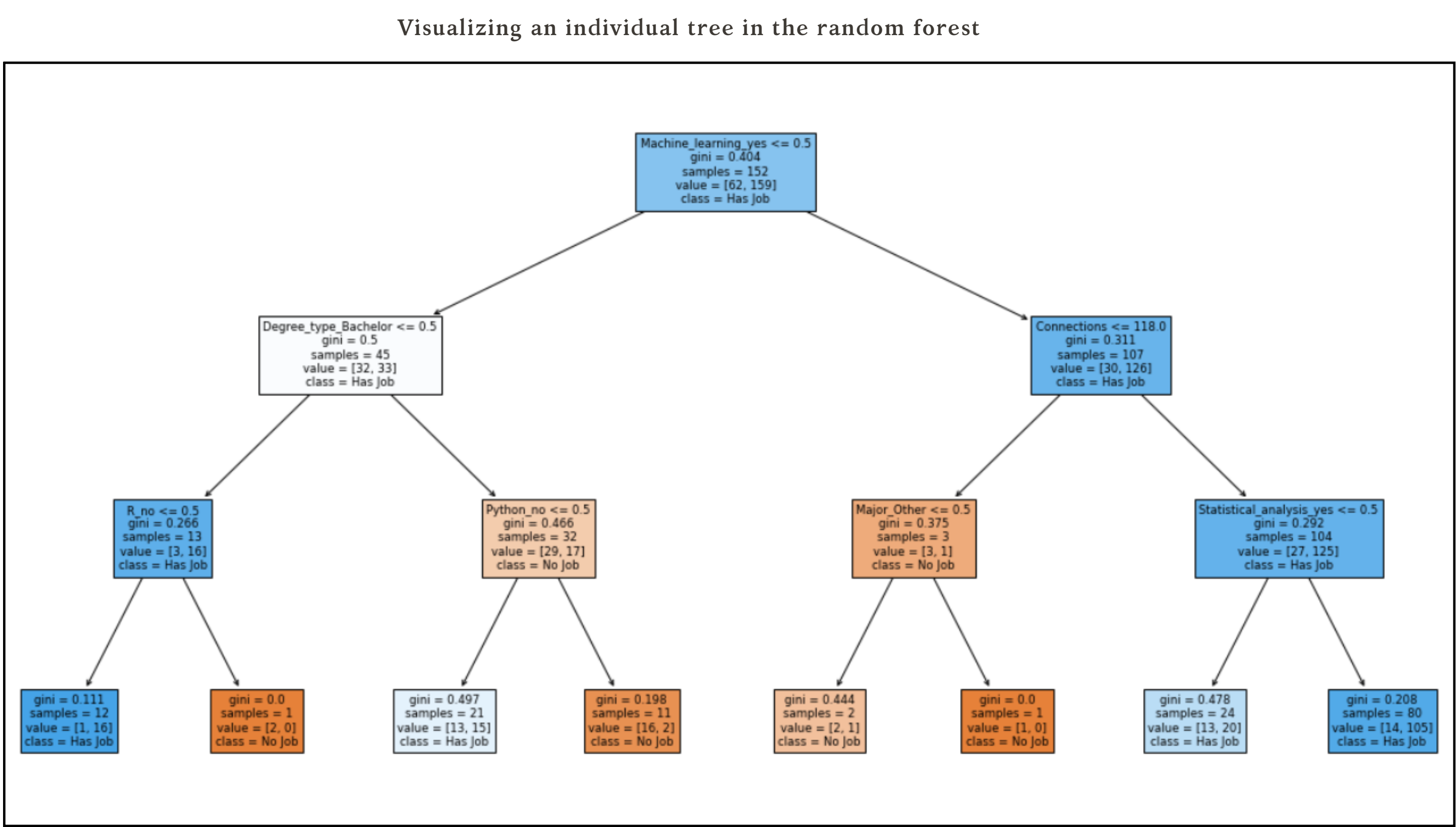
To gain insights into the factors influencing the likelihood of securing a data job, we conducted two analyses: 1) extracting key skills and tools required across various data job postings using NLP, and 2) conducting predictive modeling to assess job landing prospects based on educational background and specific skills.



## 03. Job Postings Analysis



## 04. Predictive Modeling



## 05. Key findings

- Data analysts are in the highest demand, comprising 50% of the market, followed by data entry roles and data scientists.
- The industries with the greatest demand for data roles include Information Technology & Services, followed by Services & Hospitality, and Software Development.
- Education and Retail sectors also show a notable interest in hiring for data roles, albeit to a lesser extent.
- Communication, SQL, visualization skills, and Python are the most demanded skills for data analysts. Additionally, they frequently utilize NumPy, Plotly, and Pandas in their daily tasks.
- University ranking can influence job opportunities. Also, proficiency in machine learning and AI can set a candidate apart, enhancing their prospects of securing a data-related position.