



# **DS** Job Market Analysis

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**DATA11001**  
**Introduction to Data Science**  
University of Helsinki



# Introduction

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LinkedIn®



# Why we are different from other tools

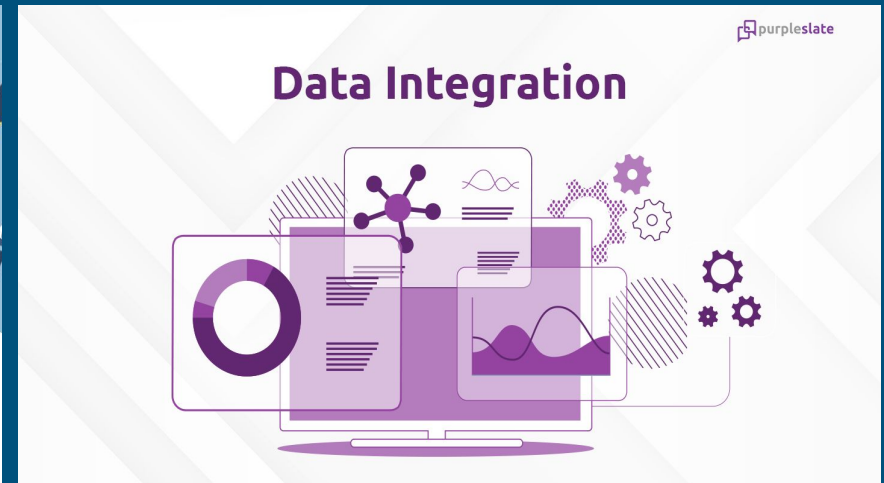
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1. **Tailored for Data Science Students** - Specifically designed to meet the unique needs of data science students at the University of Helsinki.
2. **Localized Recommendations** - Focus on job postings in the Helsinki area, ensuring relevance to students' geographical preferences.
3. **Advanced Matching Algorithms** - Utilizes TF-IDF and Cosine Similarity for precise matching based on skills and project experience.
4. **Continuous Improvement Through Feedback** - Incorporates user feedback to refine recommendations, adapting to the changing job market.
5. **Focus on Job Fit** - Prioritizes matching based on qualifications and interests, improving overall job satisfaction.
6. **Personalized User Experience** - Delivers tailored job suggestions based on individual profiles, including skills and desired work arrangements.
7. **Unique Features** - Offers exclusive tools like skill assessments and mentorship opportunities to enhance the job search experience.

# Data Preprocessing



Inbuilt data scraper : APIFY  
Platform: LinkedIn  
Jobs posted: Aug 12 - Oct 12  
Data format: csv files



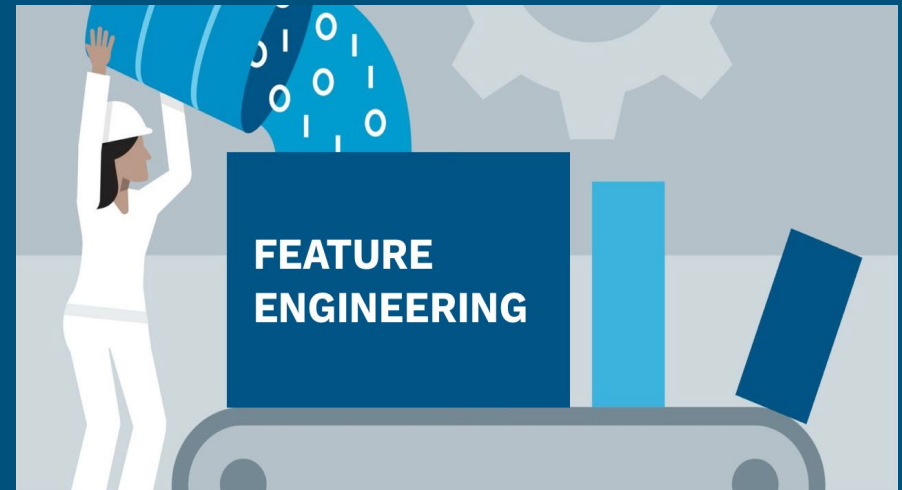
Combine CSV files  
No of records:755

# Data Preprocessing cntd.

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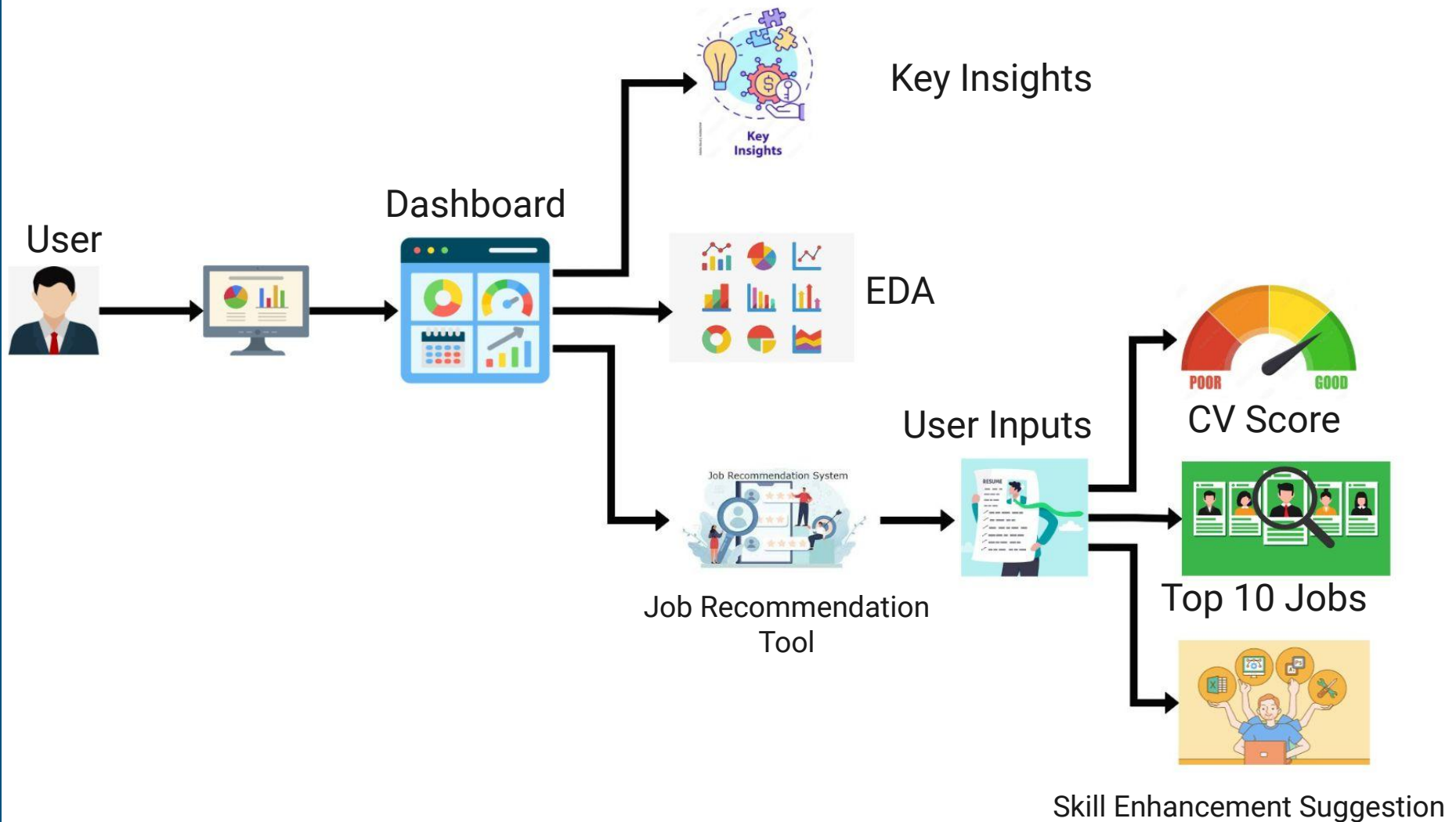


Remove identical records  
Remove records with null values  
No of records:561



Language Translation  
(Finnish → English)  
Create new variables

# Dashboard





**Q & A**

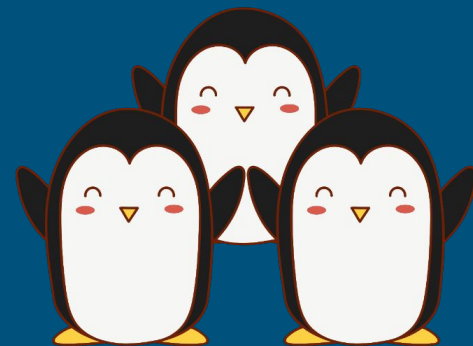
# Our Group

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Gayathri Senanayake

Dilusha Senarathna

Kavya Atapattu

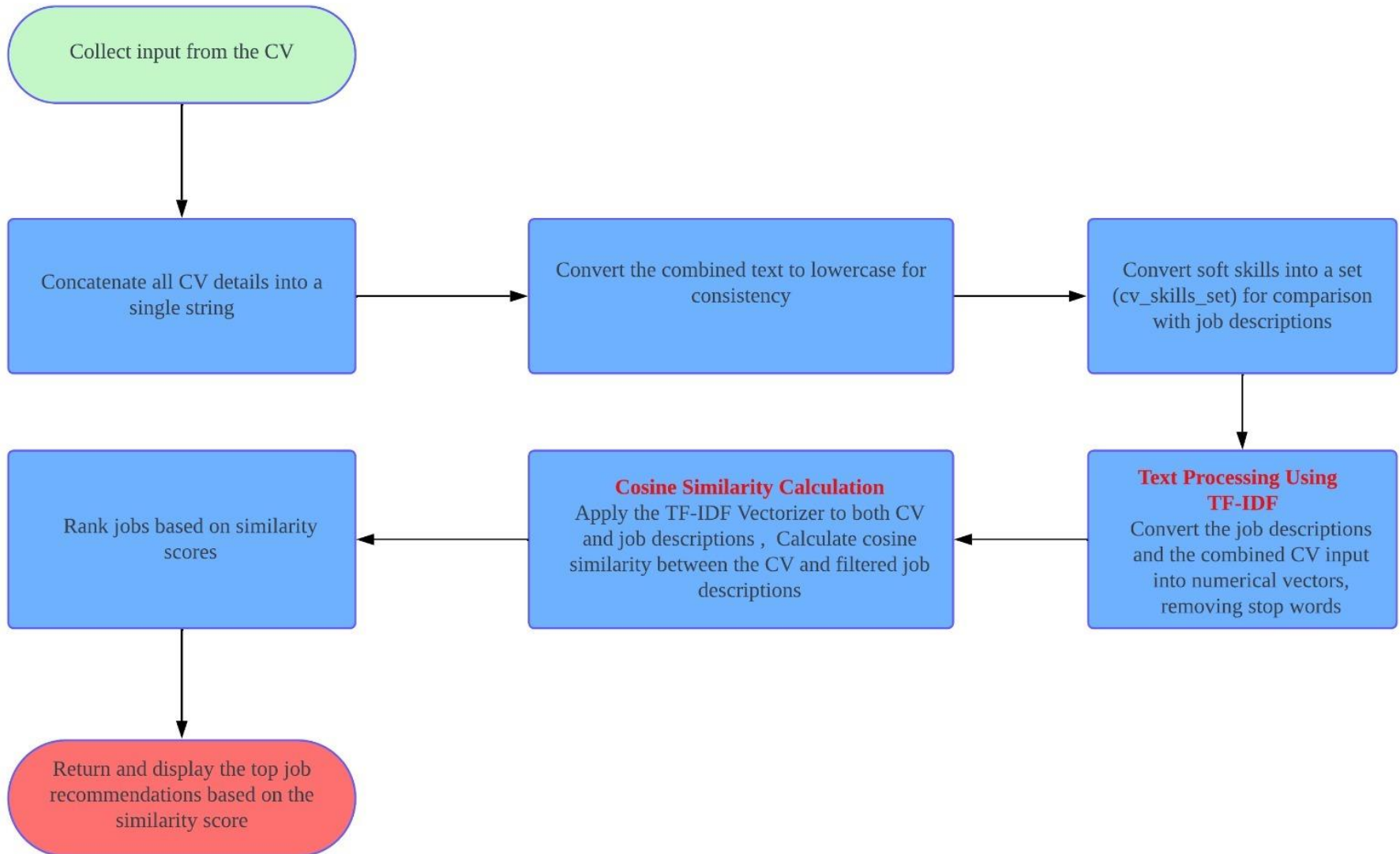






THANK  
YOU!

## Job Recommendation Process Flow



# Feature Engineering

Columns of original dataset: (20 Columns)

applications\_Count, applyType, applyUrl, companyId, company\_Name, companyUrl, contract\_Type, Description, experience\_Level, jobUrl, location, posted\_Time, posterFullName, posterProfileUr, publishedAt, Salary, Sector, Title, workType, Work\_arrangement

New Variables: (37 Columns)

Existing column	New Variables
Description	Programming languages, Data Engineering techniques, Database Applications, Soft skills, Cloud computing techniques, Company level
posted_Time	Weeks
Title	Job Title (Engineer, Manager, Programmer)
applications_Count	Intervals