



## The BIG Picture

Visual Analytics project

What is your next EU destination

to work?



# Our Motivation

Rapidly evolving job market in the European Union with promising opportunities for international students:

“EU turns to the rest of the world in hopes that hard-to-fill-jobs will finally find a match”.

*Associated Press, November 2023*

“Why Gen Zers are looking to Europe to achieve their American dream”.

*Business Insider, June 2023*

However...

Lack of centralized and comprehensive data about quality of life in Europe.



Bottleneck to the decision-making process.

# WHY is this relevant?



Centralizing data on  
quality of life indicators  
across the EU

Tailored exploratory  
search aligned with  
personal needs

Comparison of different  
metrics in multiple locales

# WHO are our stakeholders?



ttu.edu

= fresh graduate international students about to join the European job market

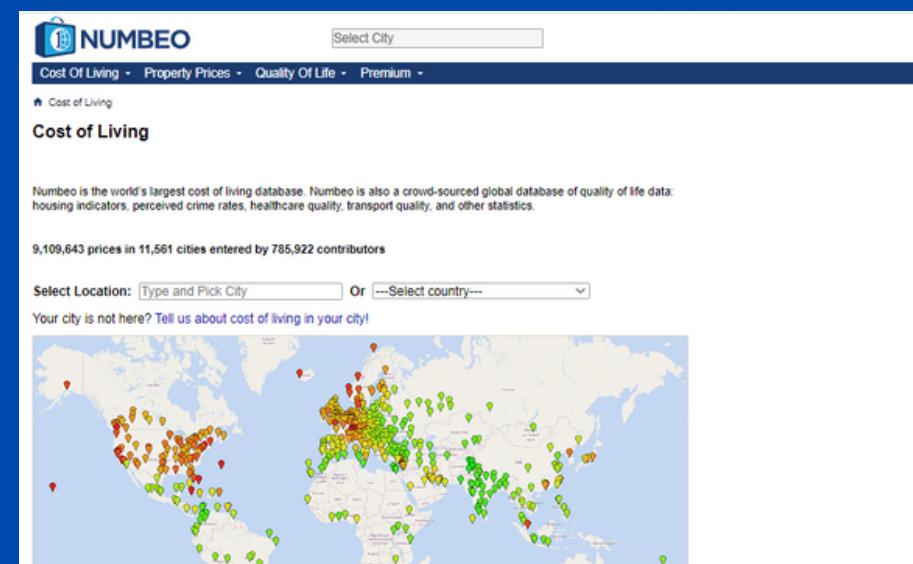
# Data sources



**NUMBEO**



- The world's largest cost of living database, providing quality-of-life data in the form of indicators such as housing, crime rates, healthcare, and transport across cities and countries worldwide.
- Crowd-sourced data: 9M prices in 12k cities by 800k contributors.
- Data extracted through API.



Global Health  
Expenditures  
Database



StackOverflow  
Survey

- Data on health expenditures for 190 countries since 2000.
- Was collected **in collaboration with the countries** using official statistics, government expenditures, and health account data.
- Over 90,000 respondents in IT.
- Compensation, type of role, education.

# Research questions



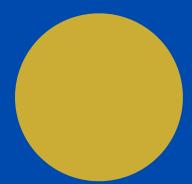
1. Which EU countries are more favorable to live and work based on different factors?
2. What are the indicators that have a bigger impact on the quality of life?
3. How can different countries' indexes relate to each other?

and now...

our demo!

<https://lavoroland.mirwise.com>

# Limitations



Scalability to  
other countries



Lack of  
niche data

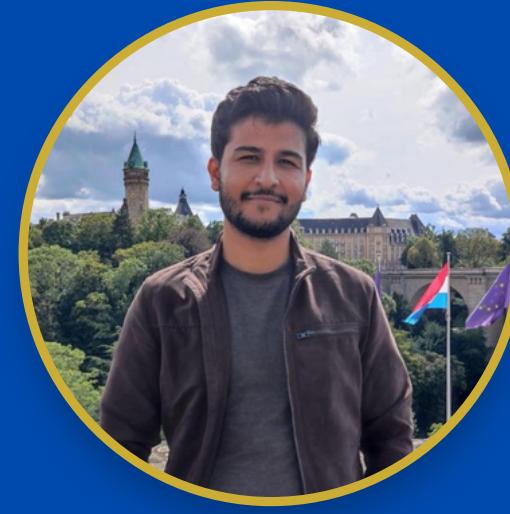
- More quality-of-life-indicators;
- Entry barriers;
- Employment rates;
- Segmentation by working sectors.

# Our Contributions



**Daniel Huf**

- Data ETL of the Numbeo dataset.
- Development of the first screen containing the grid of countries.
- Creation of the logic for filtering and assigning weights to the indicators.



**Mir Wise Khan**

- Data ETL of StackOverflow survey.
- Development of the second screen for comparative analysis between countries.
- Building scented widgets.
- Deployment of the tool to the web.



**Sayyor Yusupov**

- Data ETL of the healthcare database.
- Development of the second screen for comparative analysis between countries.



# Thank You!

