# Salary Analysis Project

# **Project Overview**

This project aims to analyze salary data across various industries and regions to uncover trends and insights related to compensation. Using a comprehensive dataset sourced from employment websites and surveys, this analysis explores factors that influence salaries, such as job title, education level, country, gender, and race.

## **Dataset Description**

The dataset used in this project provides detailed information on job titles, salaries, educational backgrounds, and geographical locations. Key attributes include:

- Age: Age of the employee.
- Gender: Gender of the employee.
- Education Level: Categorized from High School to PhD.
- Job Title: Title of the employee's job.
- Years of Experience: Total years of professional experience.
- salary: Annual salary in US Dollars.
- country: Country of employment.
- Race: Race of the employee.
- senior: Indicates a senior position (binary).

#### File Structure

- data/: Contains the raw and processed dataset files.
- visuals/: Includes all visualizations generated during the analysis.
- docs/: Contains the detailed project report and this README file.

## Methodology

The project employs a variety of data analysis techniques, including:

- Descriptive statistical analysis.
- Comparative analysis of salaries by education, job title, and country.
- Gender and race-based salary disparity analysis.
- Correlation analysis between age, experience, and salary.

- Linear regression modeling to predict salaries.
- Geographical analysis of salary trends.

#### How to Use

- Review the salary.csv file in the data/ folder for the raw dataset.
- Explore the visuals/ folder for graphical representations of the analysis.
- Read the detailed report in the docs/ folder for comprehensive insights.

### Conclusions

The project reveals significant insights into salary trends and disparities. Key findings include the impact of education and experience on salary, geographical salary variations, and disparities based on gender and race.

### **Contact Information**

For inquiries or collaborations, please contact Mohamad Chokr (mohamad00122@gmail.com).