# **TASK 2**

# **EMPLOYEE SALARIES FOR DIFFERENT JOB ROLES**

• Welcome to the Employee Salaries for Different Job Roles Dataset! This dataset provides valuable insights into employees' compensation and job roles across various industries and regions.

• Whether you're an HR analyst, data scientist, or someone interested in understanding salary trends, this dataset offers a wealth of information to explore and analyze.

• We encourage you to explore the data, perform insightful analyses, and share your findings with the Kaggle community. If you find any interesting patterns or make significant discoveries,

**About Dataset**

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**About this file**

The dataset contains a rich collection of attributes related to employee salaries and job characteristics:

* work\_year: The year of employment, providing a temporal context for salary analysis and trends.
* experience\_level: The experience level of employees, categorized as entry-level, mid-level, or senior. This field allows you to investigate the relationship between experience and compensation.
* employment\_type: The type of employment, including full-time, part-time, and contract. Exploring this field helps discern differences in pay based on employment arrangements.
* job\_title: The job title or position held by each employee. This attribute lets you compare salaries across various roles and identify high-demand positions.
* salary: The actual salary amount denominated in the local currency, forming the core of the dataset for compensation analysis.
* salary\_currency: The currency in which salaries are denoted, facilitating cross-border comparisons while considering exchange rates.
* salary\_in\_usd: The equivalent amount in USD (United States Dollars). This conversion factor enables global salary comparisons and standardizes the currency for international analyses.
* employee\_residence: The geographic location of the employee's residence, allowing for regional salary insights.
* remote\_ratio: The percentage of remote work allowed for each job role, enabling exploration of the impact of remote work on compensation.
* company\_location: The company's geographic location, facilitating analyses of regional salary variations and economic disparities.
* company\_size: The size of the company, categorized as small, medium, or large, providing insights into the correlation between company size and employee compensation.

**Steps I Followed:**

**DATA LOADING:**

* Using get data, I imported the CSV file “ds\_salaries.csv” into Power BI

**DATA MANIPULATION (Under Power Query Editor):**

* Renamed Query Name “ds\_salaries” to “Salaries”
* Renamed Columns:
  + Index Column which was nameless to ‘ID’
  + ‘work\_year’ to ‘Work Year’
  + ‘experience\_level’ to ‘Experience Level’
  + ‘employment\_type’ to ‘Employment Type’
  + ‘job\_title’ to ‘Job Title’
  + ‘salary’ to ‘Salary’
  + ‘salary\_currency’ to ‘Salary Currency’
  + ‘salary\_in\_usd’ to ‘Salary (in USD)’
  + ‘employee\_residence’ to ‘Employee Residence’
  + ‘remote\_ratio’ to ‘Remote Ratio’
  + ‘company\_location’ to ‘Company Location’
  + ‘company\_size’ to ‘Company Size’
* Changed ‘ID’ data type from Whole Number to Text
* Inserted new column from examples and selected ‘date from work year’ column and then removed ‘Work Year’ column and renamed ‘Date’ column as ‘Work Year’ column
* Loaded Transformed Data into Power BI
* In the Table view, I selected ‘Work Year’ and changed the format under the column tools tab to ‘2001 (yyyy)’
* Now, I selected ‘Salary (in USD)’ and added $ under the column tools tab
* Now, I selected ‘Company Location’ and ‘Employee Residence’ individually and changed the data category under the column tools tab to country

**DATA VISUALIZATION:**

* Average Salary - Card Visual
* Total Company Locations - Card Visual
* Total Job Titles - Card Visual
* Average Salary (USD) by Job Title - Stacked Bar Chart
* Average Salary (USD) by Experience Level - Donut Chart
* Average Salary (USD) by Company Size - Donut Chart
* Average Salary (USD) by Remote Ratio and Employment Type - Clustered Column Chart
* Salary Trend (USD) by Year - Area Map
* Total Salary (USD) by Employee Residence - Tree Map
* Employment Type - Slicer
* Location - Slicer
* Year - Slicer
* Company Size – Slicer

**Key Insights:**

1. **Average Salary Overview:**
   * The average salary across the dataset is **$112.3K**.
2. **Job Titles and Locations:**
   * The data covers **50 unique company locations** and **50 unique job titles**, indicating diverse opportunities.
3. **Salary by Job Title:**
   * The highest-paying role is **Data Analytics Lead** at **$400K**, followed by **Principal Data Engineer** at **$328.3K**.
   * Other roles like **Finance/Data Analysts** fall in the range of **$195K–$215K**, showing significant variance by title.
4. **Salary by Experience Level:**
   * **Executive (EX):** Commands the highest average salary at **$199.3K**.
   * **Mid-Senior (SE):** Earns an average of **$99.5K**, significantly lower than executives.
   * Entry-level (EN) roles earn an average of **$61.4K**, reflecting expected industry norms.
5. **Salary by Company Size:**
   * Large companies (L) offer the highest average salary of **$116.9K**, followed by medium-sized (M) and small (S) companies at **$77.6K** and **$61.4K**, respectively.
6. **Remote Ratio and Employment Type:**
   * Fully remote roles offer an average salary of **$0.19M** (highest), highlighting the demand for remote flexibility.
   * Other employment types such as hybrid or in-office have comparatively lower salaries.
7. **Salary Trend by Year:**
   * There is a clear upward trend in salaries over the years, increasing from **$95K in 2020** to **$129K in 2022**, reflecting market growth or inflation adjustments.
8. **Salary by Employee Residence:**
   * Employees in the **US** earn significantly more (around **$40.3M**) compared to those in **GB** (**$9.3M**) or other regions, showing regional disparities in compensation.

**Actionable Insights:**

* **Focus on High-Paying Roles:** Job seekers should consider roles like **Data Analytics Lead** and **Principal Data Engineer**, which have the highest salaries.
* **Experience Pays Off:** Progressing to executive-level positions can lead to substantial salary increases.
* **Location Matters:** US-based roles offer better salaries; candidates can explore relocation or remote opportunities in the US.
* **Leverage Remote Work:** Companies offering fully remote roles pay higher, making remote work a lucrative option.