

Creating a Tree Map to visualize the most popular job titles

Step 1: First, go to this link and download the salaries dataset

<https://www.kaggle.com/datasets/kaggle/sf-salaries>

Step 2: Then go to machine learning / data visualizer to upload the dataset that was downloaded.

The screenshot shows the Elasticsearch Data Visualizer interface. On the left, there's a sidebar with navigation links: Machine Learning (Overview, Data Visualizer), Anomaly Detection (Anomaly Explorer, Single Metric Viewer), Data Frame Analytics (Results Explorer, Analytics Map), and AIOps Labs (Log Rate Analysis, Log Pattern Analysis, Change Point Detection). The main area is titled 'Data Visualizer' and contains two sections: 'Index' and 'Upload files'. The 'Index' section has buttons for 'Create new index' and 'Upload to existing index', and a field for 'New index name'. The 'Upload files' section has a large dashed box for file selection with the placeholder 'Select or drag and drop files' and a note that supports PDF, TXT, CSV, log files, and NDJSON formats.

Make sure to choose the .csv file

The screenshot shows a macOS Finder window with a dark theme. The sidebar on the left lists 'Favorites' (AirDrop, Recents, Applications, Desktop, Documents, Downloads) and 'iCloud' (iCloud Drive). The main pane is titled 'archive' and contains a list of files. Two files are visible: 'database.sqlite' and 'Salaries.csv'. The 'Salaries.csv' file is selected and highlighted with a blue background. At the bottom of the window, the file path is shown as: Untitled 2 > Users > nicholascur > Downloads > archive > Salaries.csv.

Step 3: Go to Dev Tools and run these two functions in order to include the job title in the ML model. Having the original JobTitle in its text form will produce an error in the ML model, so we need to make a keyword version of it to use instead.

```
PUT sf_salaries_fixed
{
  "mappings": {
    "properties": {
      "JobTitle": {
        "type": "text",
        "fields": {
          "keyword": {
            "type": "keyword"
          }
        }
      }
    }
  }
}

POST _reindex
{
  "source": {
    "index": "sf_salaries"
  },
  "dest": {
    "index": "sf_salaries_fixed"
  }
}
```

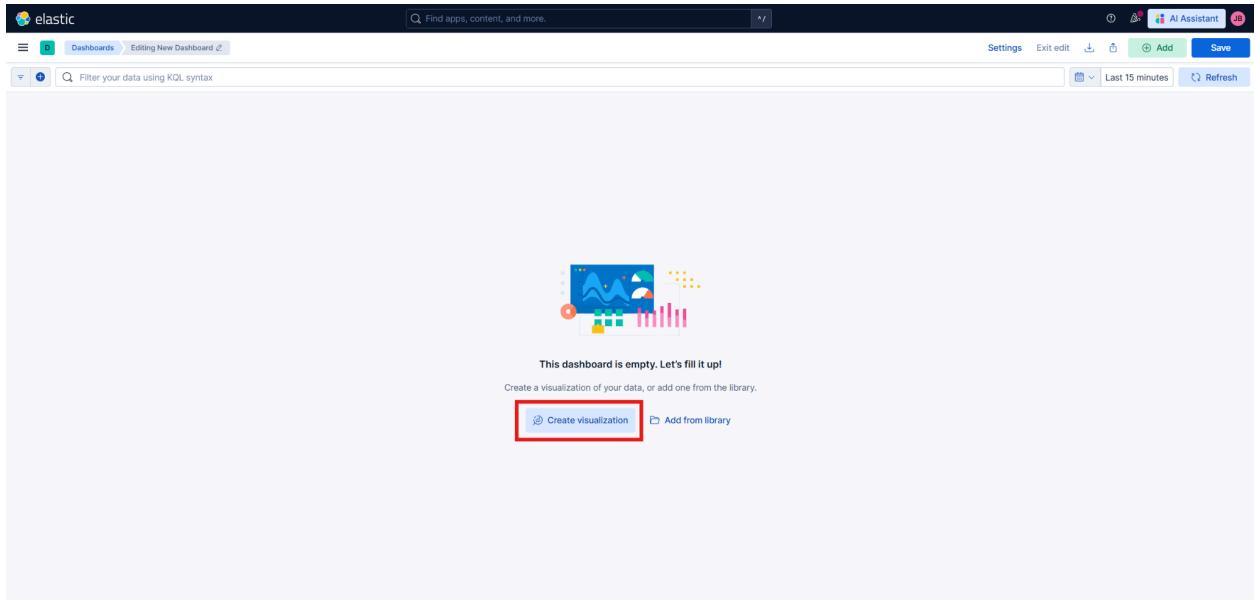
Step 4: Go to “home” from the hamburger menu.

The screenshot shows the Elastic Stack interface. At the top, there is a dark header with the 'elastic' logo. Below it, a navigation bar includes a three-line hamburger menu icon, a teal square with a white 'D', and a 'Home' button. A red box highlights the 'Home' button. The main content area has a dark header with a 'Manage this deployment' icon and the word 'Manage this deployment'. Below this, a white box contains a house icon and the word 'Home', also highlighted with a red box. To the right, there is a section titled 'Analytics' with a dropdown arrow. Further down, there are sections for 'Discover' and 'Dashboards'.

Step 5: Go to Analytics > Dashboard.

The screenshot shows the Elastic Stack interface with a more detailed view. On the left, a sidebar menu is open, showing 'Analytics' expanded. Under 'Analytics', 'Discover' and 'Dashboards' are listed, with 'Dashboards' having a red arrow pointing to it. The main content area features a 'Welcome home' section with cards for 'Elasticsearch' and 'Analytics'. Below this is a 'Get started by adding integrations' section with buttons for 'Add integrations', 'Try sample data', and 'Upload a file'. At the bottom, there is a 'Management' section with four buttons: 'Manage permissions', 'Monitor the stack', 'Back up and restore', and 'Manage index lifecycles'. The 'Dashboards' link in the sidebar is also highlighted with a red box.

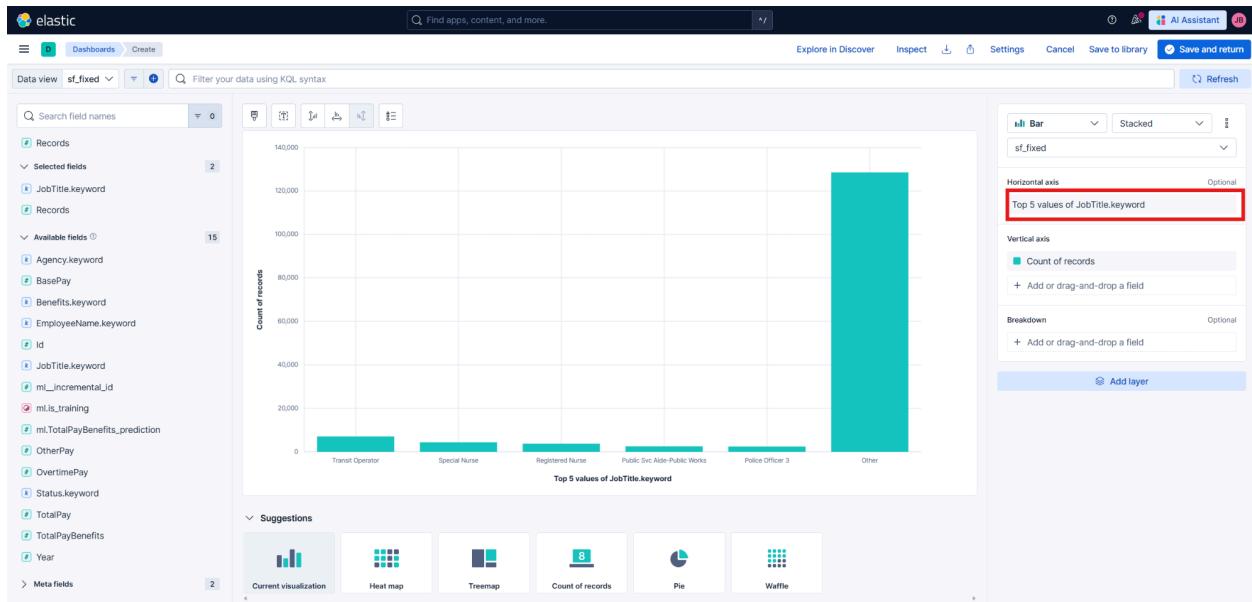
- a. Select Create Dashboard.
- b. Select Create visualization.



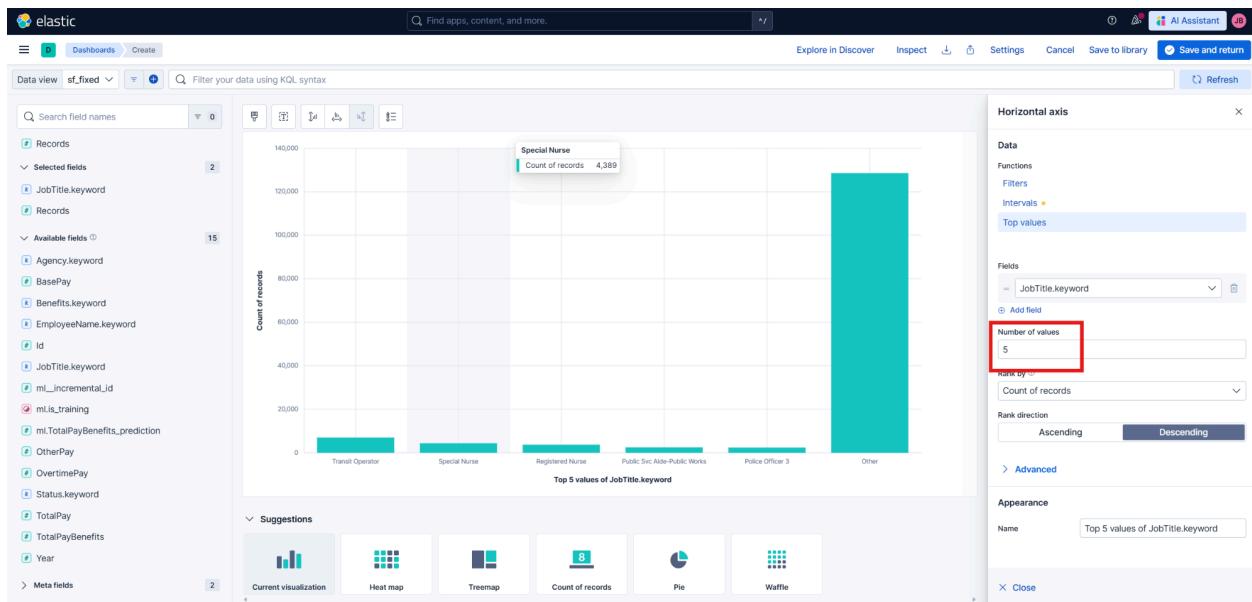
Step 6: Select the “+” symbol that appears when you hover over “JobTitle.keyword”.

A screenshot of the Elasticsearch Data View interface. The left side shows a sidebar with 'sf_fixed' selected under 'Data view'. Below it is a list of 'Available fields' with 15 items. One item, 'JobTitle.keyword', has a tooltip 'Add JobTitle.keyword to workspace' and a red arrow pointing to its '+' symbol. The right side of the screen shows a visualization builder with a 'Bar' chart type selected. It includes sections for 'Horizontal axis' (set to 'sf_fixed'), 'Vertical axis' (empty), and 'Breakdown' (empty). A central area says 'Drop some fields here to start' with a hand icon. At the bottom, there are links for 'Lens is the recommended editor for creating visualizations' and 'Make requests and give feedback'.

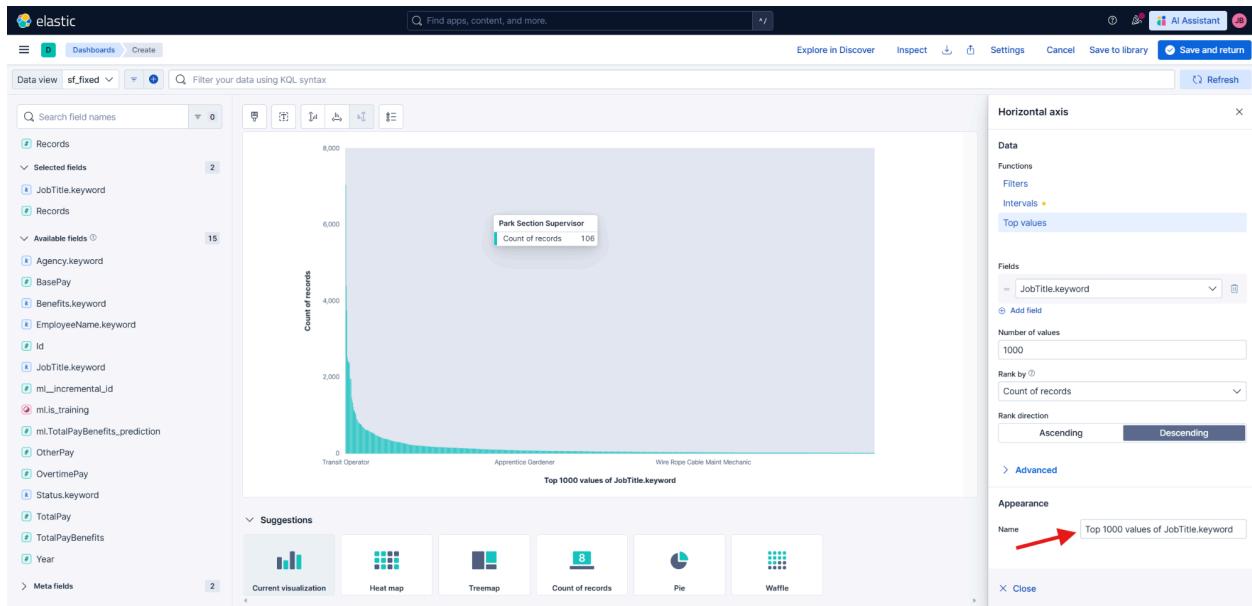
Step 7: Select the Horizontal axis “Top 5 values of jobTitle.keyword”.



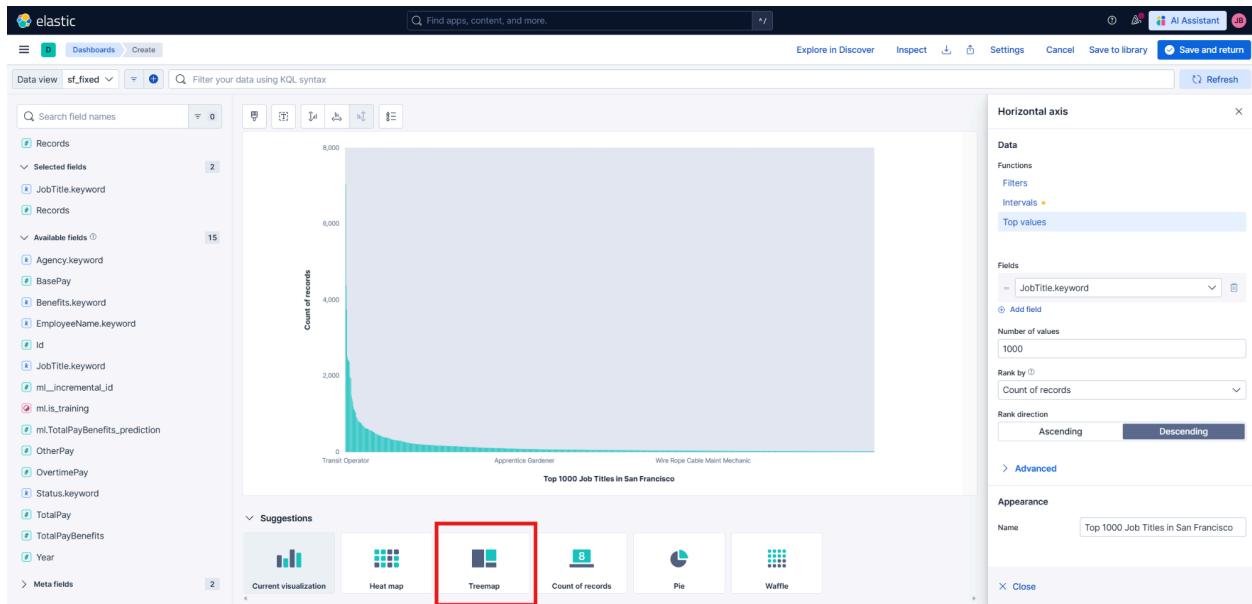
Step 8: Change the “Number of values” to 1000.



Step 9: Change the name of Appearance to “Top 1000 Job Titles in San Francisco”.

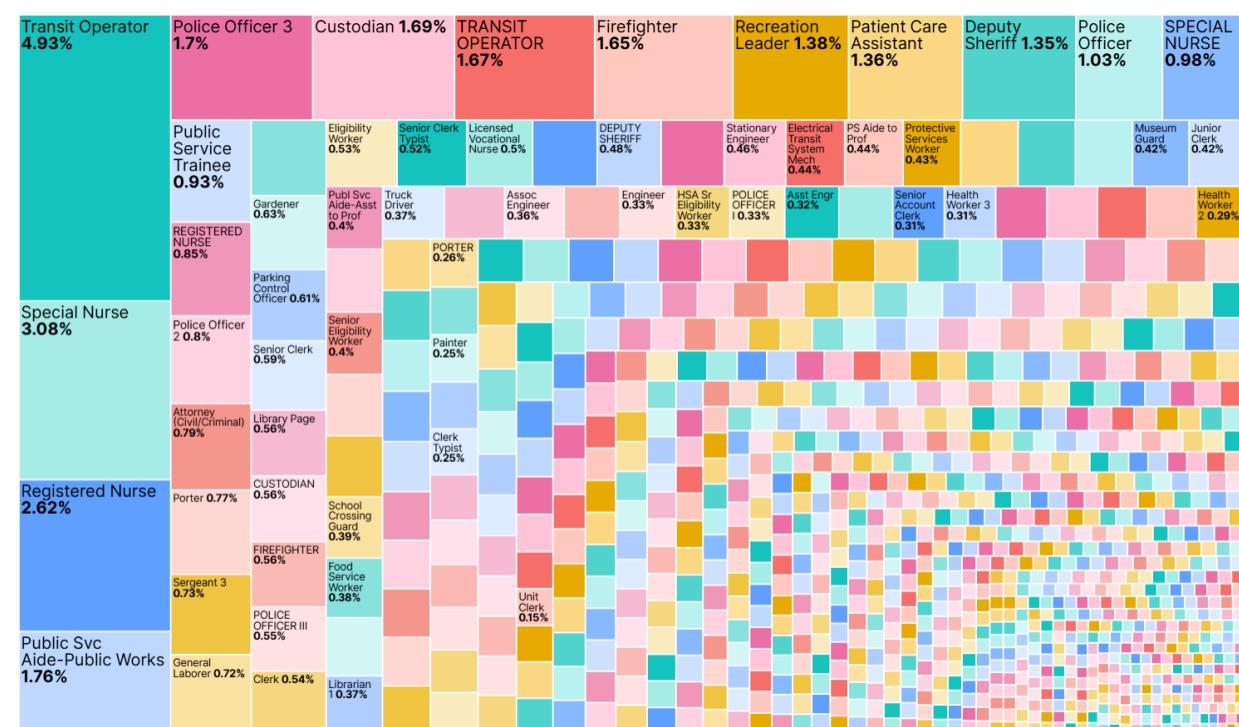
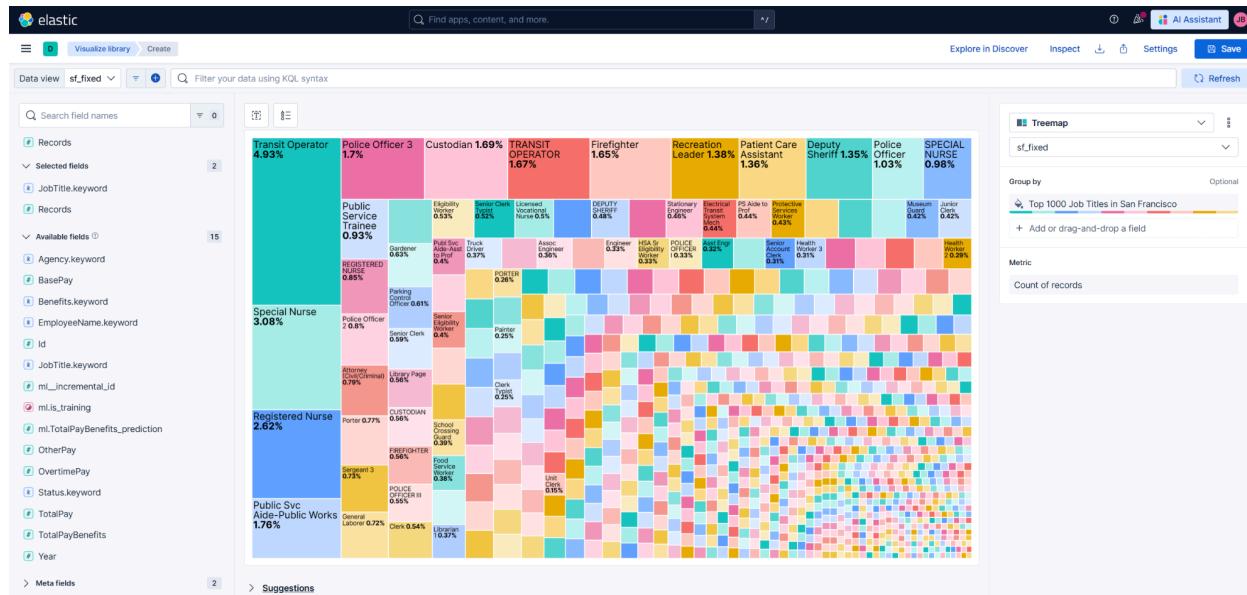


Step 10: select “Treemap” in the suggestions.



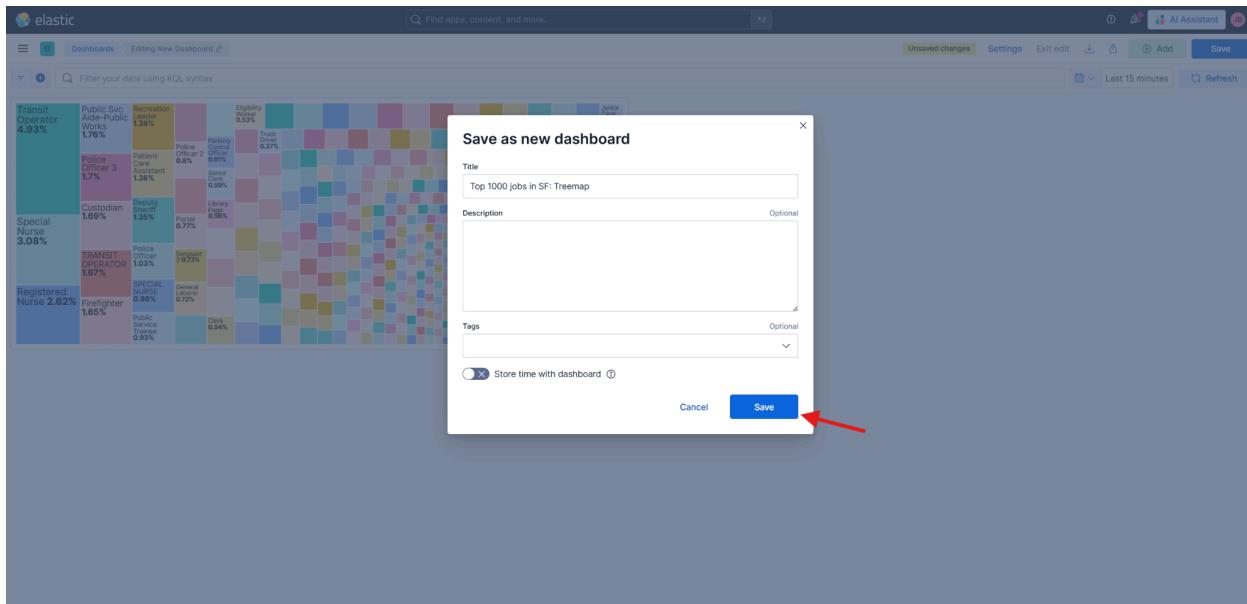
Step 11: select “Save and return”.





Step 12: Select “save” on the top right corner.

- a. Title the new dashboard: "Top 1000 Jobs in SF: Treemap".
 - b. Select save.



*****This concludes the top 1000 jobs treemap tutorial*****