

My AI Assistant for IR work



Institutional Research Data Analyst

Ph.D. in System Science
Masters in Financial Economics
Bachelors in Economics



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Personal AI Assistants

ChatGPT

- Code Assistant for work efficiency Assist - SQL Query ...
 - Do tedious category input
 - Customize query result format for surveys
- Email Assistant for effective communication Assist - Email Writer ...
 - Prompt Engineering tips
 - Time saving
- Text Analysis Assistant for research potential Assist - Text data analyst ...
 - Design analysis framework
 - Confidential data & Coding assistant
 - Exploring the accuracy and practicability



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You

CASE WHEN IT IN (ME
NMTR
CE
CMPT
COE
MFEN
MTSE
DD
ECET

User Context: Extract data based on a list of CIP code, Field of Study

ChatGPT

Here's the 'CASE' statement to categorize values in the 'IT' column based on the provided values:

```
sql
CASE
  WHEN IT IN ('ME', 'NMTR', 'CE', 'CMPT', 'COE', 'MFEN', 'MTSE', 'DD', 'ECET', 'PSE')
  ELSE 'Other_Category'
END AS Category
```

Replace 'Some_Category' and 'Other_Category' with the actual category names you want to use.

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You

can you combine these query into one query, give three column, each query for each result "-- Nc Degree

```
SELECT LEFT(PROGMAJOR, 2) AS FIELD, COUNT(SID)
FROM [dbo].[SURE Enrollment F2023 Final]
WHERE ETHNICMULTIRACE = 'International'
AND CITIZEN <> 'I'
AND MATSTAT <> 'I'
GROUP BY LEFT(PROGMAJOR, 2)
ORDER BY LEFT(PROGMAJOR, 2)
```

-- Undergraduate

```
SELECT LEFT(PROGMAJOR, 2) AS FIELD, COUNT(SID)
FROM [dbo].[SURE Enrollment F2023 Final]
WHERE ETHNICMULTIRACE = 'International'
```

-- Graduate

```
SELECT LEFT(PROGMAJOR, 2) AS FIELD, COUNT(SID)
FROM [dbo].[SURE Enrollment F2023 Final]
WHERE ETHNICMULTIRACE = 'International'
AND CITIZEN <> 'I'
AND MATSTAT = 'I'
AND U_G IN ('G','D')
GROUP BY LEFT(PROGMAJOR, 2)
ORDER BY LEFT(PROGMAJOR, 2)'
```

User Context: Updated survey format

ChatGPT

Sure, here's the combined query:

```
sql
SELECT
  LEFT(PROGMAJOR, 2) AS FIELD,
  SUM(CASE WHEN MATSTAT <> 'I' THEN 1 ELSE 0 END) AS No_Degree,
  SUM(CASE WHEN MATSTAT = 'I' AND U_G = 'U' THEN 1 ELSE 0 END) AS Undergraduate,
  SUM(CASE WHEN MATSTAT = 'I' AND U_G IN ('G','D') THEN 1 ELSE 0 END) AS Graduate
FROM [dbo].[SURE Enrollment F2023 Final]
WHERE ETHNICMULTIRACE = 'International'
AND CITIZEN <> 'I'
GROUP BY LEFT(PROGMAJOR, 2)
ORDER BY LEFT(PROGMAJOR, 2);
```

This query combines the logic of the three individual queries into a single query using conditional aggregation. It calculates the count of 'SID' records for each 'PROGMAJOR' prefix ('LEFT(PROGMAJOR, 2)') based on different conditions for 'MATSTAT' and 'U_G', grouped by the 'PROGMAJOR' prefix.

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Email Assistant

■ Prompt tips

- Toning the AI assistant with professional context
- Set up the “personality” of the AI assistant
- Give working context(i.e., brief data explanation, concise email body)
- Do not mix email task with different styles, it changes its “personality”
- Once it specialize one setting, it can deal with complicated context give effective information

Text Analysis Assistant

 **Data Analysis & Report AI**
Great! You can upload the survey data here, and we'll dive into analyzing it. We can look into patterns like common sentiments in student comments, trends across different courses or departments, and other interesting insights. If you have specific survey questions or aspects you'd like to focus on, please let me know!

 **You**
 Spreadsheet

Data Description



Data Analysis & Report AI

Thank you for uploading the file! Let's first take a look at the data to understand its structure and content. I'll load the spreadsheet and display a summary of its contents.

The data from the student survey includes the following columns:

1. **YEAR_SEMESTER**: The semester and year the survey was taken.
2. **DEPARTMENT**: The department under which the course is classified.
3. **COLLEGE**: The college under which the department falls.
4. **COURSE_CRN**: Course identifier.
5. **TMETHOD**: Teaching method, which has some missing values.
6. **Q6_What are the best features of this course?:** Positive feedback about the course.
7. **Q7_What aspects of the course would you want to see improved?:** Suggestions for course improvement.
8. **Q11 Instructor Comments**: Additional comments regarding the instructor.

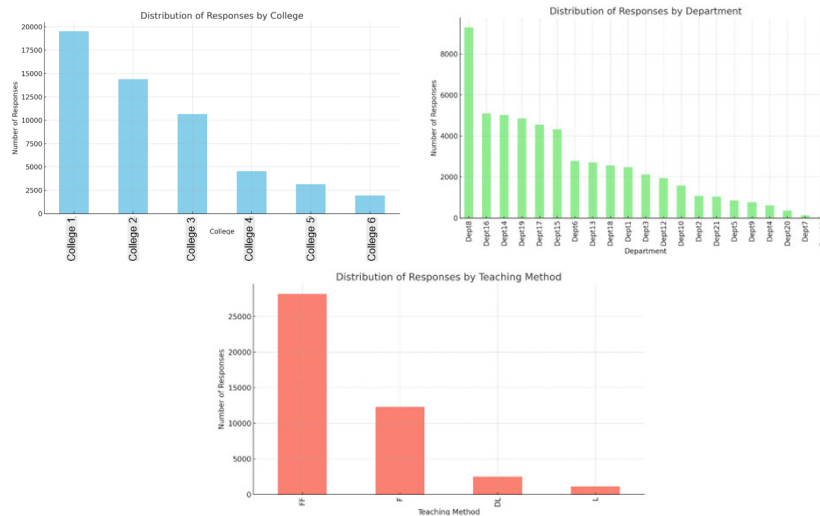


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Overview



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Areas for Improvement (Dept 8)

- **Topic 1 (Assignments and homework approach):** Average Sentiment Score = 0.020
- **Topic 2 (Course structure and teaching methods):** Average Sentiment Score = 0.203
- **Topic 3 (Student engagement and project management):** Average Sentiment Score = 0.179

Instructor Comments (Dept 8)

- **Topic 1 (Professor's handling of the course and material relevance):** Average Sentiment Score = 0.020
- **Topic 2 (Positive attributes of the professor and instructor):** Average Sentiment Score = 0.457
- **Topic 3 (Class dynamics and student engagement):** Average Sentiment Score = 0.072

Call for Collaboration

