

## **Smith Insights**

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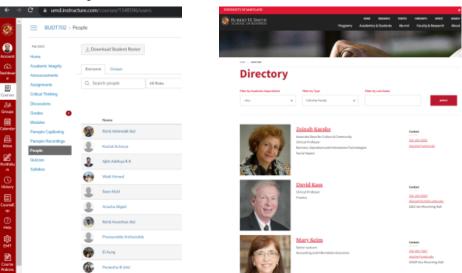
Date: 12/03/2023



## **Background**

- Users of this database include:
  - Prospective students
  - Smith Management Team
  - Department Deans
- Program data was sourced from their respective websites
  - Program statistics provided by the Office of Career Services and HireSmith

- Student data sourced from ELMS
- Faculty data from Smith directory



- Ranking data sourced from:
  - o US News
  - QS World



## **Background**

## Program Data, 2022

**Employment rate 6** months of graduation

Average starting salary, 2020-2023

Average percent job growth

**Number of Credits** 

**Average GPA** 

**Number of Faculty** 



## **Background**

**Student Data, MSIS 2023** 

**Student Information** 

**Enrollment Semester** 

**Graduation Semester** 

Faculty Data, 2023

**Faculty Information** 

Program Employment Information



#### Introduction

#### **Mission Statement:**

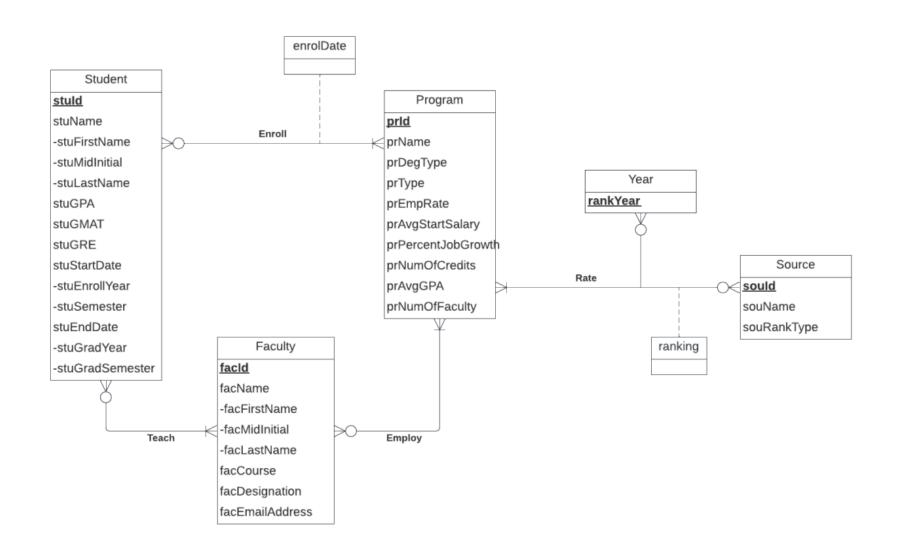
To organize all necessary data sourced through several ranking agents about the overall rank of all the graduate programs at the University of Maryland's Robert H. Smith School of Business between 2021-2023. To build insights about program characteristics associated with higher ranks for more tailored strategies aimed at increasing program rank.

#### Mission Objective:

- To determine what factors are prioritized more heavily in a particular source's ranking of a program
- To determine the programs that improved in ranking within the past 3 years and examine their characteristics
- To determine if *higher statistics* (average GPA, average starting salary, employment rate etc.) impacts a program's ranking
- To determine if high numbers of faculty impacts a program's ranking



## **ER Diagram**





#### **Relational Schema**

Source (**sould**, souName, souRankType)

Year(<u>rankYear</u>)

Program(**prld**, prName, prDegType, prType, prEmpRate, prAvgStartSalary, prPercentJobGrowth, prNumofCredits, prAvgGPA, prNumofFaculty)

Student(<u>stuld</u>, <u>stuFirstName</u>, <u>stuMidInitial</u>, <u>stuLastName</u>, <u>stuGPA</u>, <u>stuGRE</u>, <u>stuGMAT</u>, <u>stuEnrollYear</u>, <u>stuSemester</u>, <u>stuGradYear</u>, <u>stuGradSemester</u>)

Faculty(<u>facId</u>, <u>facFirstName</u>, <u>facMidInitial</u>, <u>facLastName</u>, <u>facCourse</u>, <u>facDesgination</u>, <u>facEmailAddress</u>)

Rate(*prld, sould, rankYear,* ranking)

Enroll(*stuld*, *prld*, enrolDate)

Employ(*facId*, *prId*)

Teach (*facId*, *stuId*)



### **Physical Database Design**

```
CREATE TABLE [Smith Ranking.Rate] (
        prld CHAR (4) NOT NULL,
        sould CHAR (3) NOT NULL,
        rankYear DATE NOT NULL,
        ranking INTEGER,
        CONSTRAINT pk_Rate_prid_sould_rankYear PRIMARY KEY (prid, sould, rankYear),
        CONSTRAINT fk Rate prid FOREIGN KEY (prid)
               REFERENCES [Smith Ranking.Program] (prld)
               ON DELETE NO ACTION ON UPDATE NO ACTION,
        CONSTRAINT fk_Rate_sould FOREIGN KEY (sould)
               REFERENCES [Smith Ranking.Source] (sould)
               ON DELETE NO ACTION ON UPDATE NO ACTION,
        CONSTRAINT fk_Rate_rankYear FOREIGN KEY (rankYear)
               REFERENCES [Smith Ranking.Year] (rankYear)
               ON DELETE NO ACTION ON UPDATE NO ACTION
                );
```

## What is the trend of Smith school program rankings issued by QS World between 2021-2023?

```
SELECT p.prName AS 'Program',
YEAR(r.rankYear) AS 'Year', r.ranking AS
'Ranking'
FROM [Smith_Ranking.Program] p JOIN
[Smith Ranking.Rate] r
ON p.prld = r.prld
WHERE r.sould = '2'
ORDER BY p.prName, r.rankYear ASC,
r.ranking ASC;
```

	Program	Year	Ranking
1	Business Analytics	2021	25
2	Business Analytics	2022	31
3	<b>Business Analytics</b>	2023	38
4	Finance	2021	41
5	Finance	2022	44
6	Finance	2023	44
7	Marketing Analytics	2021	34
8	Marketing Analytics	2022	37
9	Marketing Analytics	2023	39
10	Supply Chain Mgmt	2021	24
11	Supply Chain Mgmt	2022	26
12	Supply Chain Mgmt	2023	28



# What are the average starting salaries and their average rankings issued between 2021-2023 of Smith school programs?

```
SELECT p.prName AS 'Program',
AVG(p.prAvgStartSalary) AS 'Average
Starting Salary', AVG(r.ranking) AS 'Average
Ranking', s.souName AS 'Source'
FROM [Smith_Ranking.Program] p JOIN
[Smith Ranking.Rate] r
ON p.prld = r.prld JOIN
[Smith Ranking.Source] s
ON r.sould = s.sould
GROUP BY p.prName, s.souName
ORDER BY AVG(r.ranking) ASC,
AVG(p.prAvgStartSalary) DESC;
```

	Program	Average Starting Salary	Average Ranking	Source
1	Information Systems	85666	10	U.S. News
2	Supply Chain Mgmt	59789	18	U.S. News
3	Accounting	63229	24	U.S. News
4	Supply Chain Mgmt	59789	26	QS World
5	Business Analytics	71389	31	QS World
6	Marketing Analytics	87953	36	QS World
7	Finance	74285	43	QS World



#### References

Average Starting Salaries, 2020-2023 - <a href="https://careers.rhsmith.umd.edu/hiresmith/">https://careers.rhsmith.umd.edu/hiresmith/</a>

Accounting Program Data - <a href="https://www.rhsmith.umd.edu/programs/business-masters/academics/accounting">https://www.rhsmith.umd.edu/programs/business-masters/academics/accounting</a>

Finance Program Data - <a href="https://www.rhsmith.umd.edu/programs/business-masters/academics/finance">https://www.rhsmith.umd.edu/programs/business-masters/academics/finance</a>

Business Analytics Program Data - <a href="https://www.rhsmith.umd.edu/programs/business-masters/academics/business-analytics-person">https://www.rhsmith.umd.edu/programs/business-masters/academics/business-analytics-person</a>

Information Systems Program Data- <a href="https://www.rhsmith.umd.edu/programs/business-masters/academics/information-systems">https://www.rhsmith.umd.edu/programs/business-masters/academics/information-systems</a>

Management Studies Program Data - https://www.rhsmith.umd.edu/programs/business-masters/academics/management-studies-person

Marketing Analytics Program Data - <a href="https://www.rhsmith.umd.edu/programs/business-masters/academics/marketing-analytics">https://www.rhsmith.umd.edu/programs/business-masters/academics/marketing-analytics</a>

Quantitative Finance Program Data - <a href="https://www.rhsmith.umd.edu/programs/business-masters/academics/quantitative-finance">https://www.rhsmith.umd.edu/programs/business-masters/academics/quantitative-finance</a>

Supply Chain Management Data - https://www.rhsmith.umd.edu/programs/business-masters/academics/supply-chain-management

Faculty Data - <a href="https://www.rhsmith.umd.edu/directory">https://www.rhsmith.umd.edu/directory</a>

MSIS 2023 First-Year Student Data - https://umd.instructure.com/courses/1348596/users

QS World Rankings - <a href="https://www.topuniversities.com/world-university-rankings/2023">https://www.topuniversities.com/world-university-rankings/2023</a>

U.S. News Rankings - <a href="https://www.usnews.com/best-graduate-schools/top-business-schools/university-of-maryland-college-park-01104">https://www.usnews.com/best-graduate-schools/top-business-schools/university-of-maryland-college-park-01104</a>

