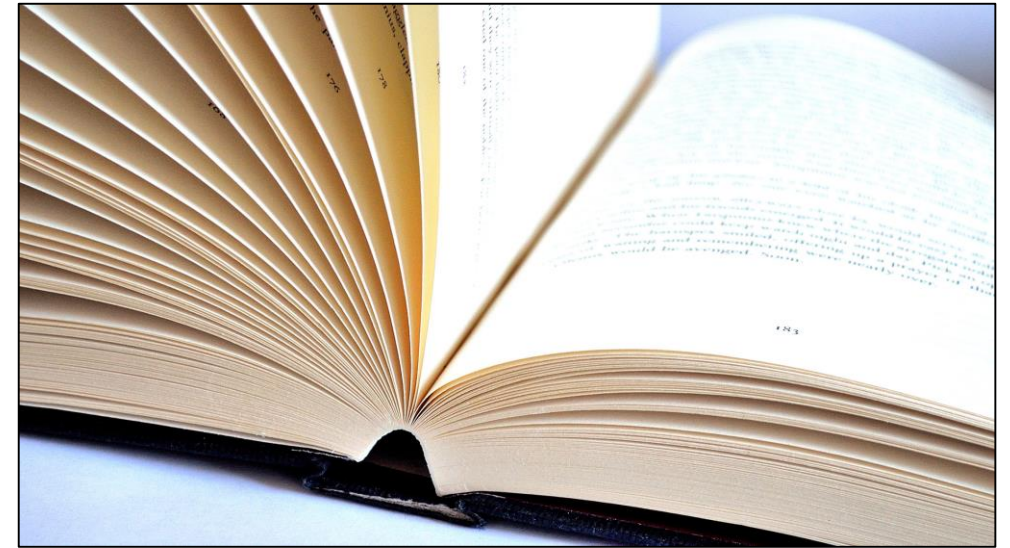


# IBM DATA SCIENCE SPECIALIZATION COURSE

*Analysing Education Abroad*

# **ANALYSING THE TREND IN THE EDUCATION SECTOR TO STUDY ABROAD**

- Most recent education trend is to study abroad in a foreign country
- Reasons for this include:
  - Exposure to new cultures,
  - Learning to live independently,
  - Forming new networks and so on
- Foreign universities offer various kinds of specializations with a degree (eg.: a double major)



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However, the number of students studying abroad is more than half of the number of foreign students studying in India

## **DATA ACQUISITION AND CLEANING**

- Two sets of data have been sourced from websites hosted by the Indian Government and a non-governmental organization
- One set consists of the number of foreign students studying in Indian from 2014 to 2017
- The other set consists of the various countries that Indian students have migrated to in 2014
- Using FourSquare, data of the universities in New York and Rajasthan was acquired.

			Rank	Number of Students
Year			Destination	
1	2014	65602	United States	1 97613
2	2015	74061	Australia	2 25562
3	2016	72542	United Kingdom	3 19604
4	2017	69322	Canada	4 13626
			New Zealand	5 10255

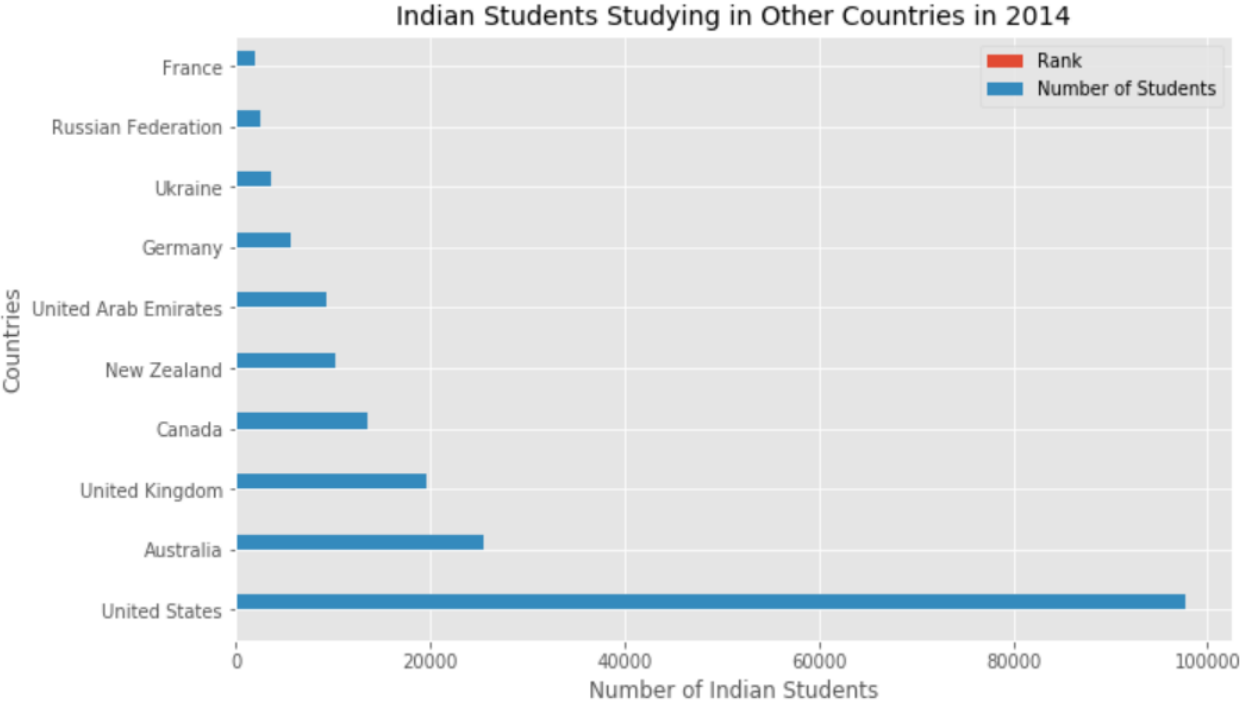
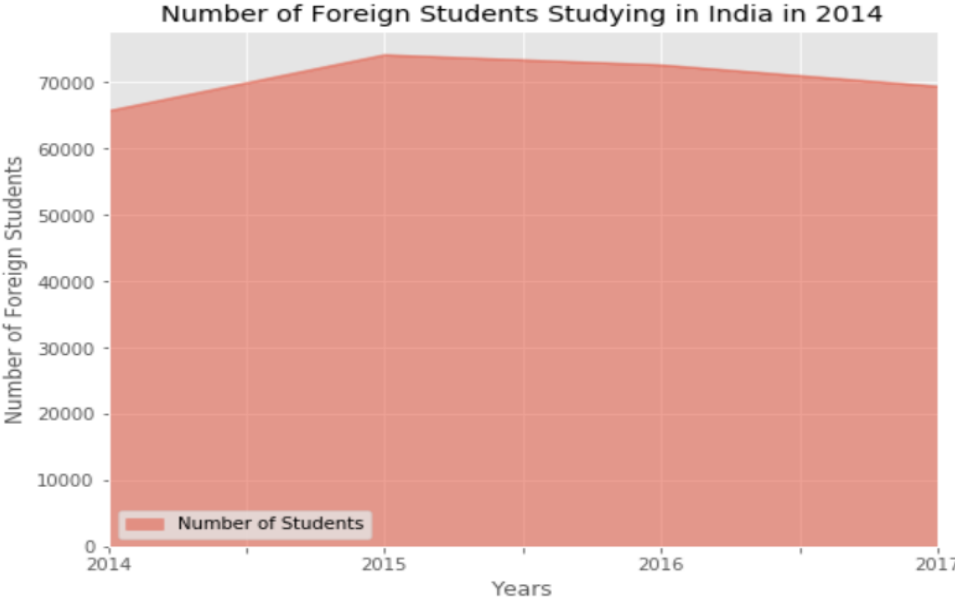
# Data Acquired Using FourSquare

	name	categories	address	city	country	distance	formattedAddress	lat	lng	state	id
0	Pace University	University	1 Pace Plz	New York	United States	224	[1 Pace Plz (btwn Nassau & Gold St), New York,...	40.710720	-74.005743	NY	49e7c7c6f964a5201b651fe3
1	New York University	University	25 W 4th St	New York	United States	2162	[25 W 4th St, New York, NY 10012, United States]	40.729518	-73.993122	NY	5058de7be4b007870dd7ad7a
2	Columbia University	University	116th St & Broadway	New York	United States	11137	[116th St & Broadway, New York, NY 10027, Unit...	40.807282	-73.962849	NY	4227a500f964a520c51f1fe3
3	Pace University - William St	University	163 William St	New York	United States	298	[163 William St (at Ann St), New York, NY 1003...	40.710052	-74.006267	NY	4cd03c7ca03a9eb0b458b103
4	Pace University Gym	College Gym	1 Pace Plz	New York	United States	143	[1 Pace Plz (btwn Nassau & Gold St), New York,...	40.711573	-74.005255	NY	4cc0aa4522ce4688e6c63847

	name	categories	address	city	country	distance	formattedAddress	lat	lng	state	id
0	university Staff Colony, Jodhpur	None	NaN	NaN	India	94576	[India]	26.267945	73.037710	NaN	50268a84e4b0a90de240b15f
1	SPUP - Sardar Patel University of Police, Secu...	University	NaN	NaN	India	83891	[India]	26.397253	73.063681	NaN	55a0e3d7498e818b3cb719eb
2	university Staff Colony, Jodhpur	None	NaN	NaN	India	95675	[India]	26.261844	73.029049	NaN	50268b0ce4b08ea913aca0ed
3	National Law University	Law School	NLU	Jodhpur	India	86116	[NLU (Nau meel road), Jodhpur, Rājasthān, India]	26.361829	73.063791	Rājasthān	4e09fbd52271dfa46bc0244f
4	M D S University	University	NaN	Ajmer	India	97704	[Ajmer, Rājasthān, India]	26.499952	74.686970	Rājasthān	4e38e72014959f8577a3df50

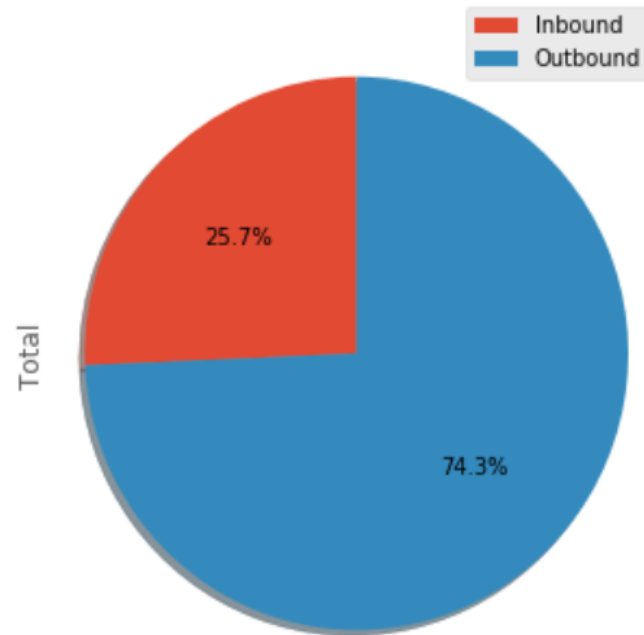
# **METHODOLOGY**

# Explanatory Data Analysis

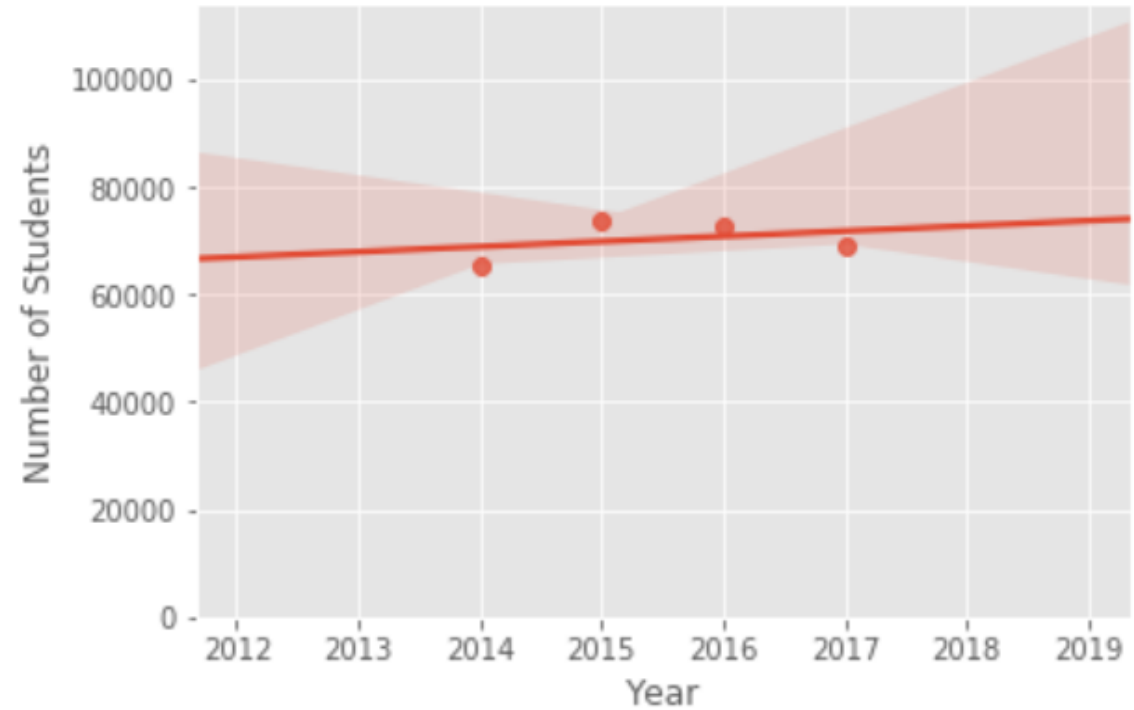




## Comparing Number of Inbound and Outbound Students (India – 2014)

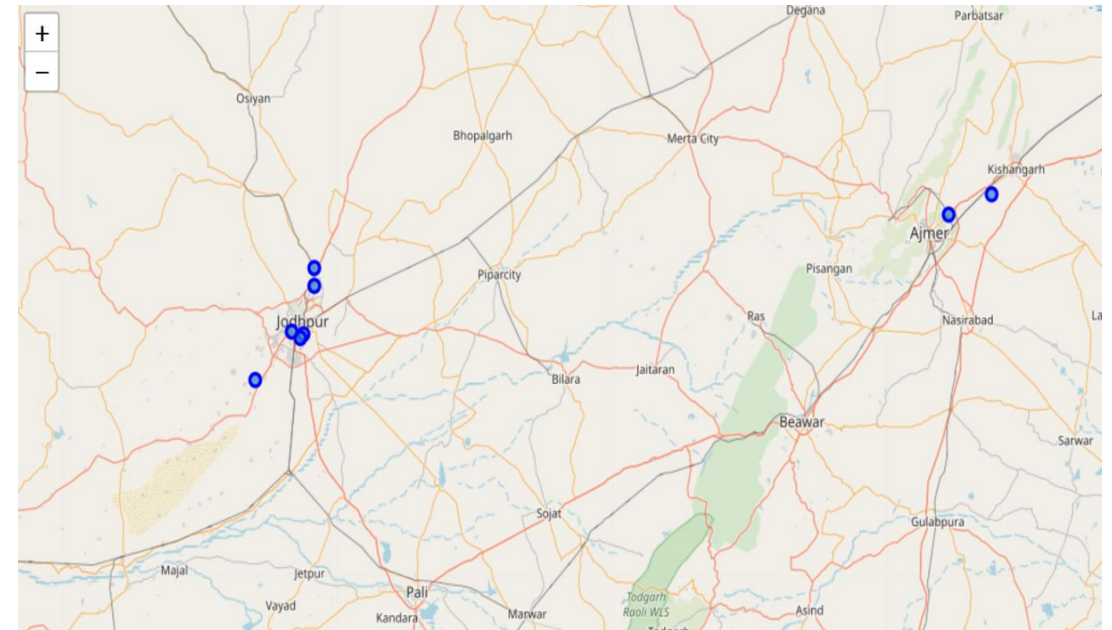
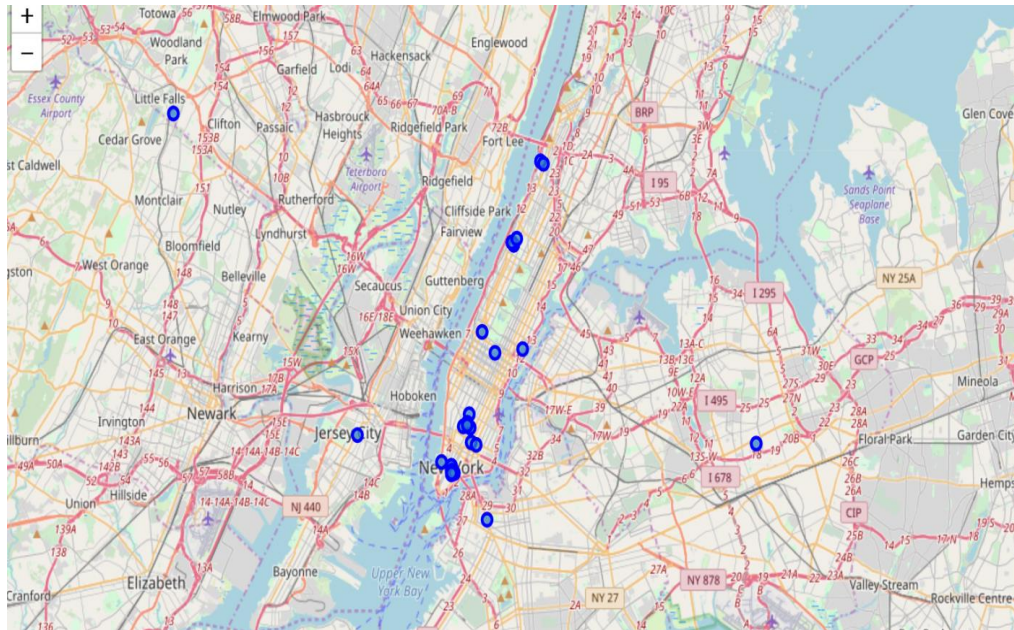


- To predict the number of students
- A linear regression model was built and fitted based on the data from the first data set
- The model was evaluated by using a regression plot

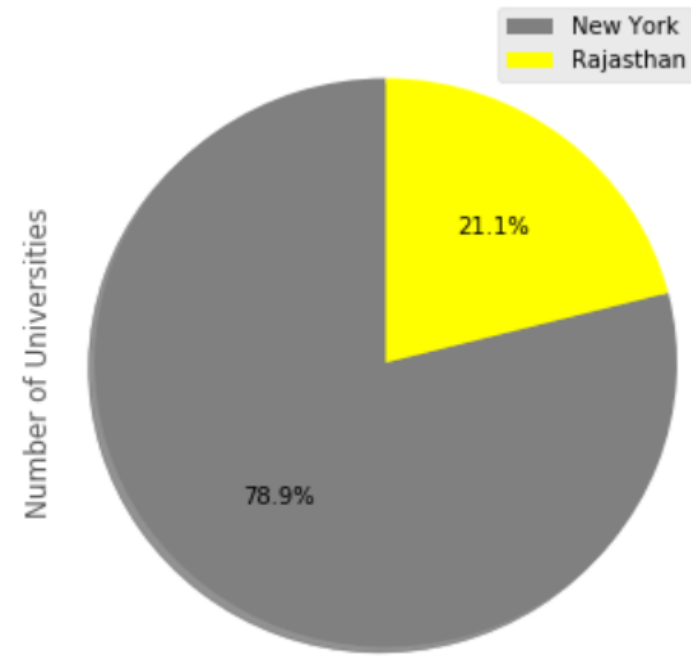


$$\text{Number of Students} = -1872761.80 + 964.1 * \text{Year}$$

For further analysis, FourSquare location data was used to compare two states:  
New York is one of the four states in America with the most number of universities  
Rajasthan is the state in India with the most number of universities



## Comparing the number of universities in New York vs Rajasthan



## **CONCLUSION**

- Number of foreign students studying in India is less compared to the number of Indian students studying in other countries.
- United States of America was the country that had the most number of Indian students in 2014.
- Number of universities available could be one of the reasons for more number of outbound students from India.
- The data procured was insufficient for building reliable models and future predictions.
- Even though the times have changed and new countries have risen with better opportunities, we have inferred that Indians prefer studying abroad, especially in the United States of America.
- India must improve its education system in order to make it more attractive to foreigners as well as its own citizens