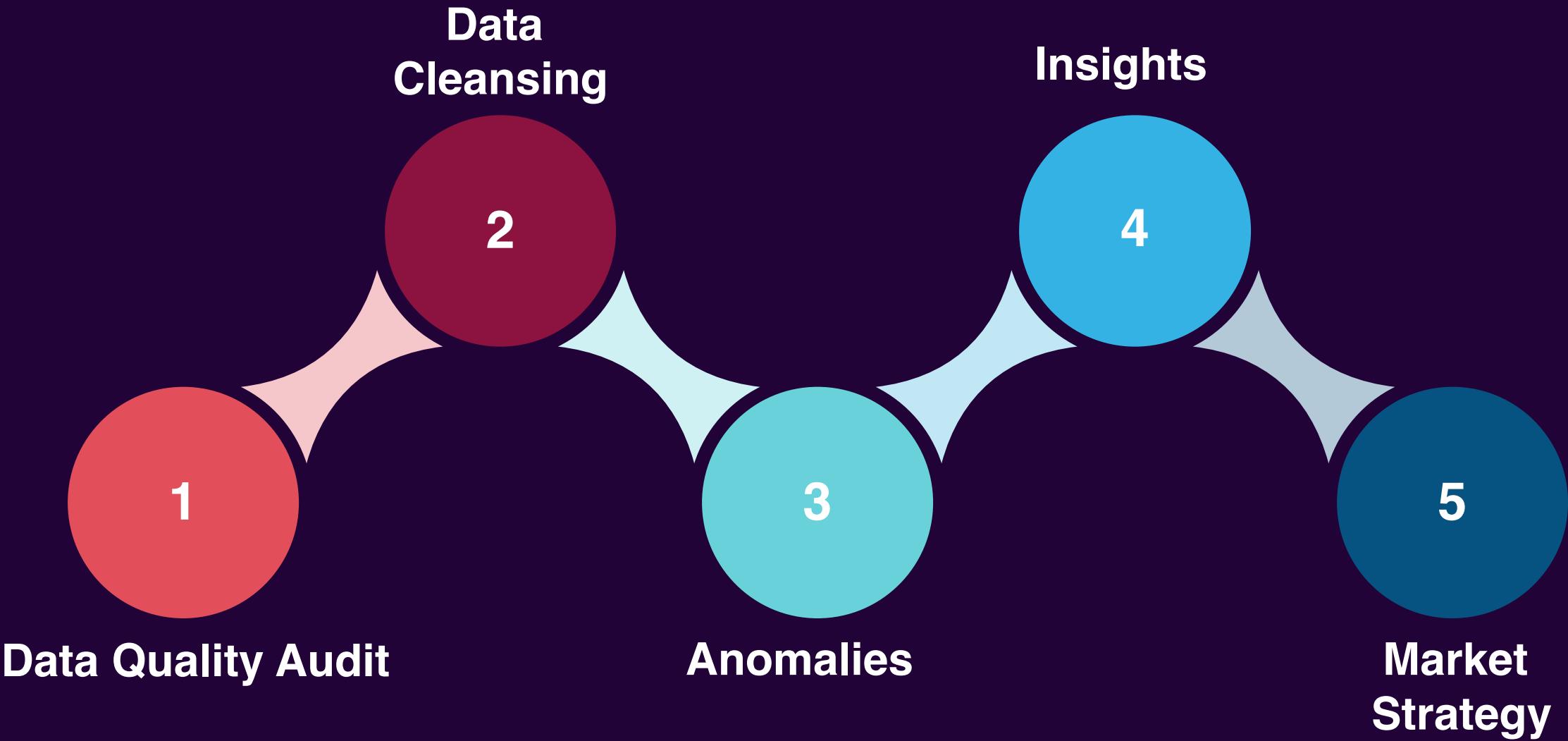


Data Anomalies Detection

Market Strategy For United States' Colleges

Sam Xiong, Shreyaskumar Kathiriya, Trishul Prabhakar, Luhanzhi Li, Shengyuan Zhang, Xinyu Chen

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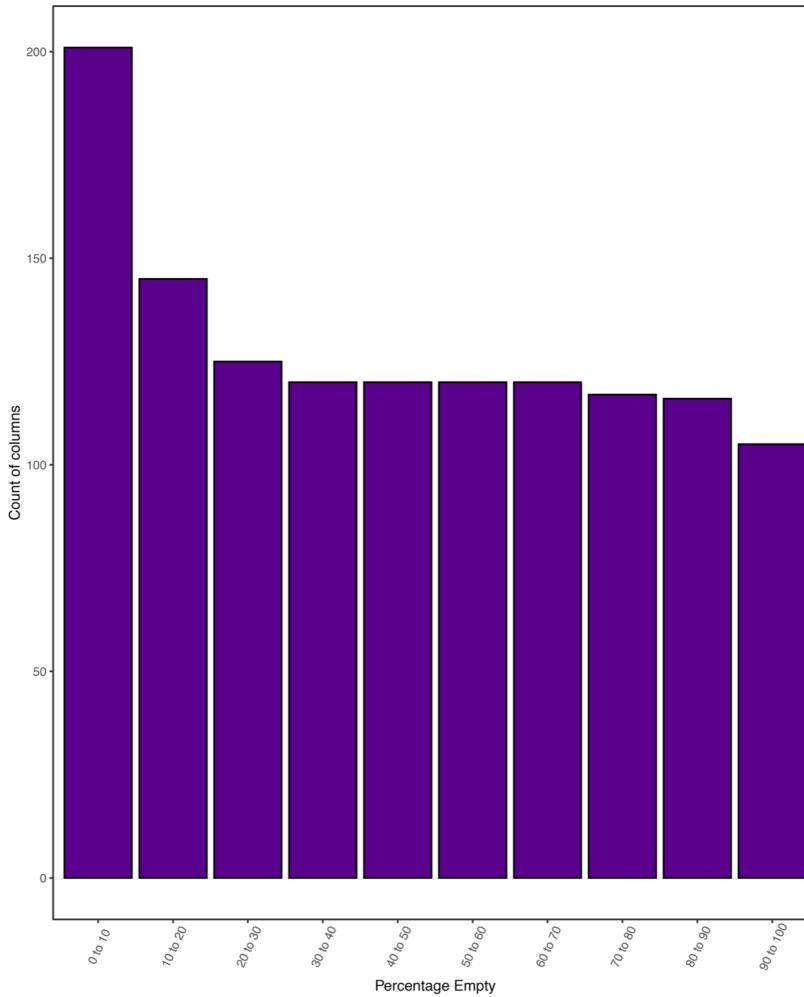


Data Quality Audit

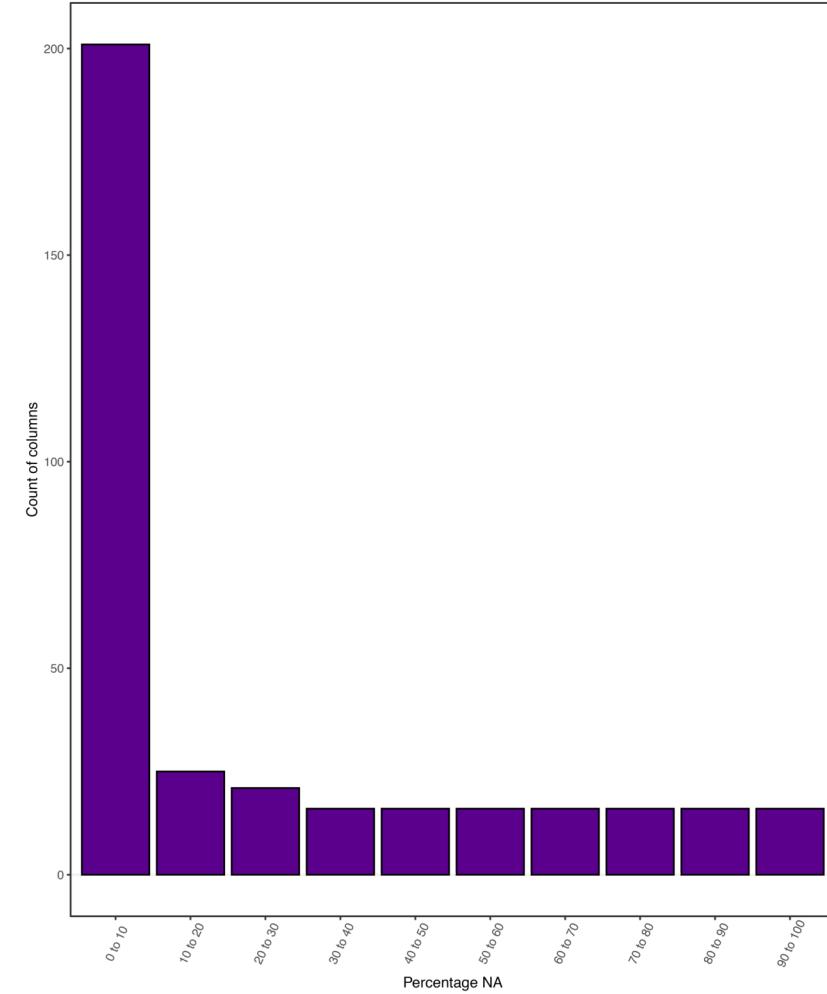
Numerical & Categorical

Percentage of Columns with NAs and Blanks

Count of Empty columns in percentage bins:



Count of NA columns by percentage bins:



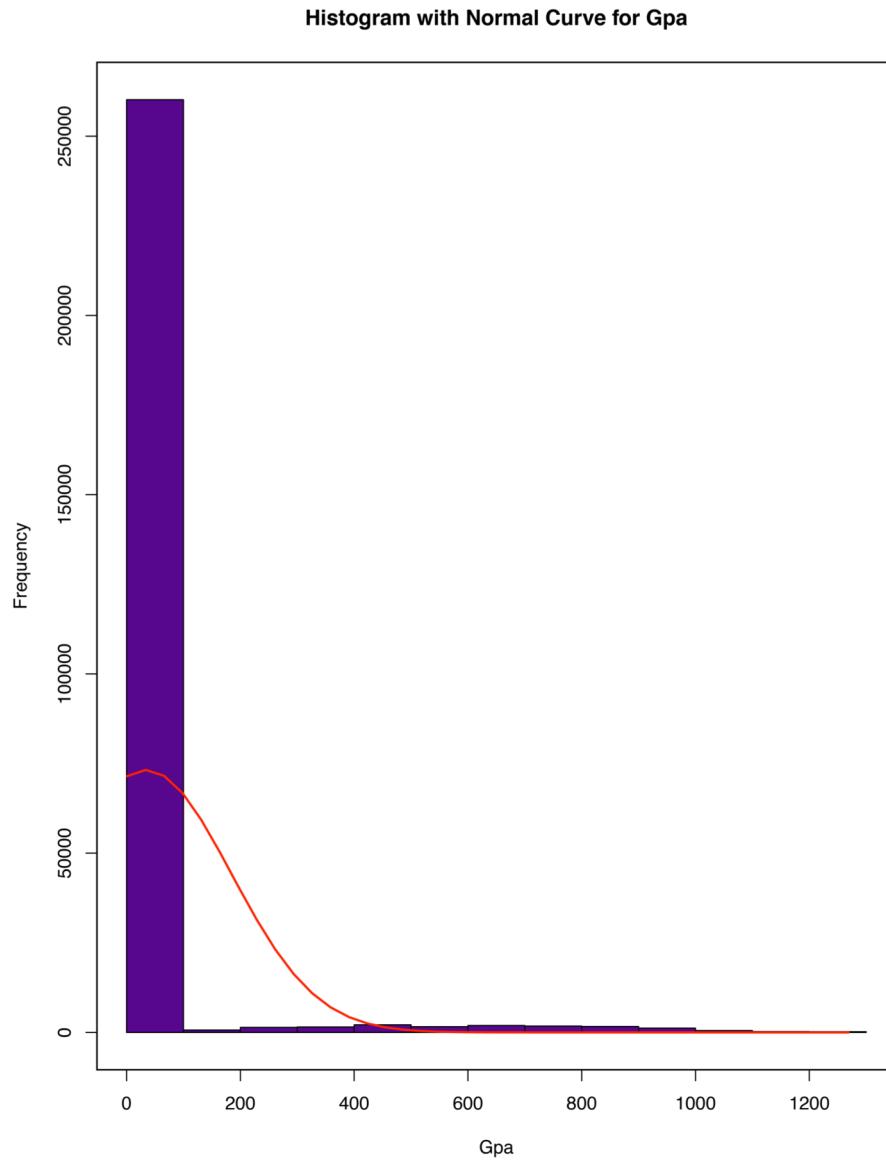
95%

Threshold for Blanks

97%

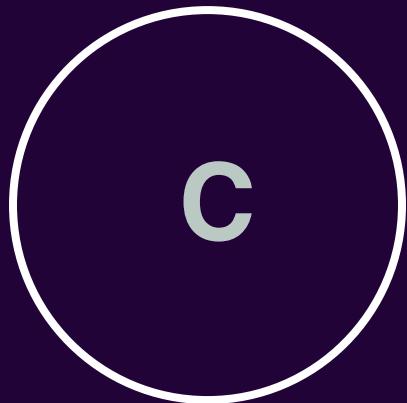
Threshold for NAs

Error in Data within GPA and Spelling



States
Spring
fall India
Visit United
india
Campus
Fall 10/1/2019
Female visit USA
Spring linkedin
Linkedin

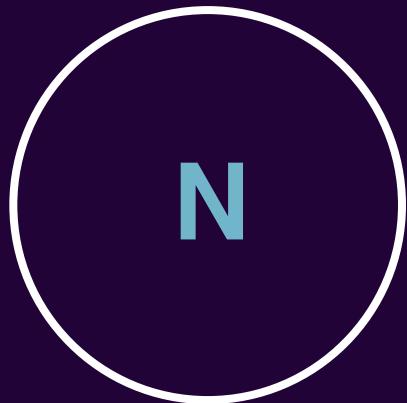
Data Cleansing and Normalization



Cleanse

Deleting

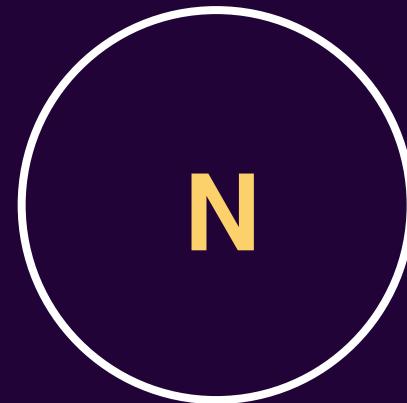
- NAs
- Blanks



Normalize

Grouped Variables

- Programs
- Sources
- Terms



Normalize

Calculations

- Age
- Time regarding applications



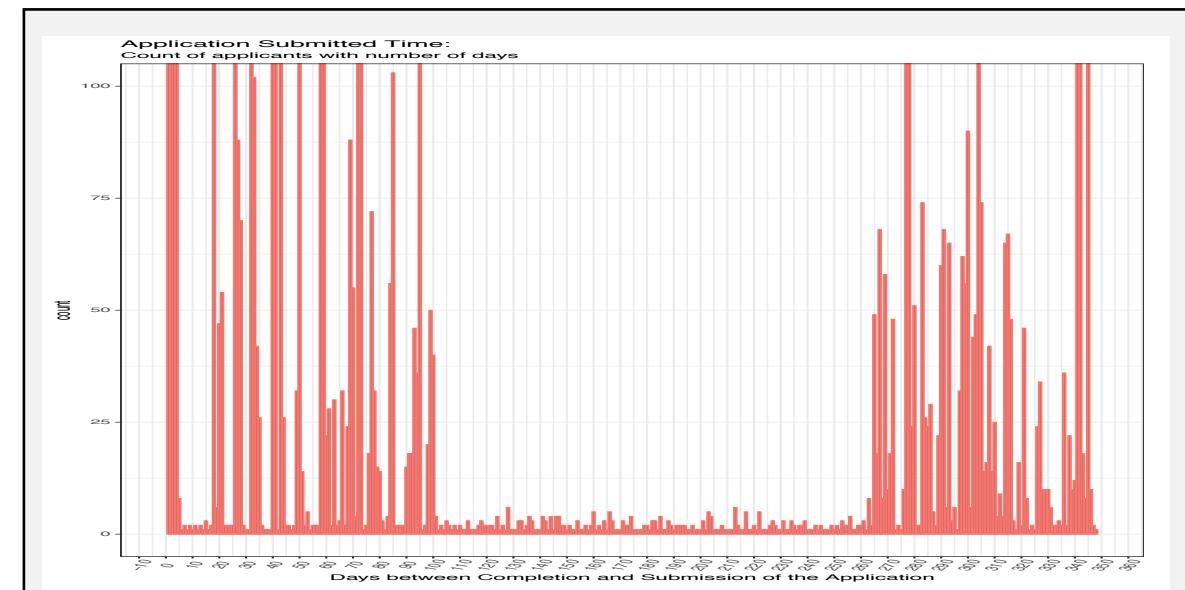
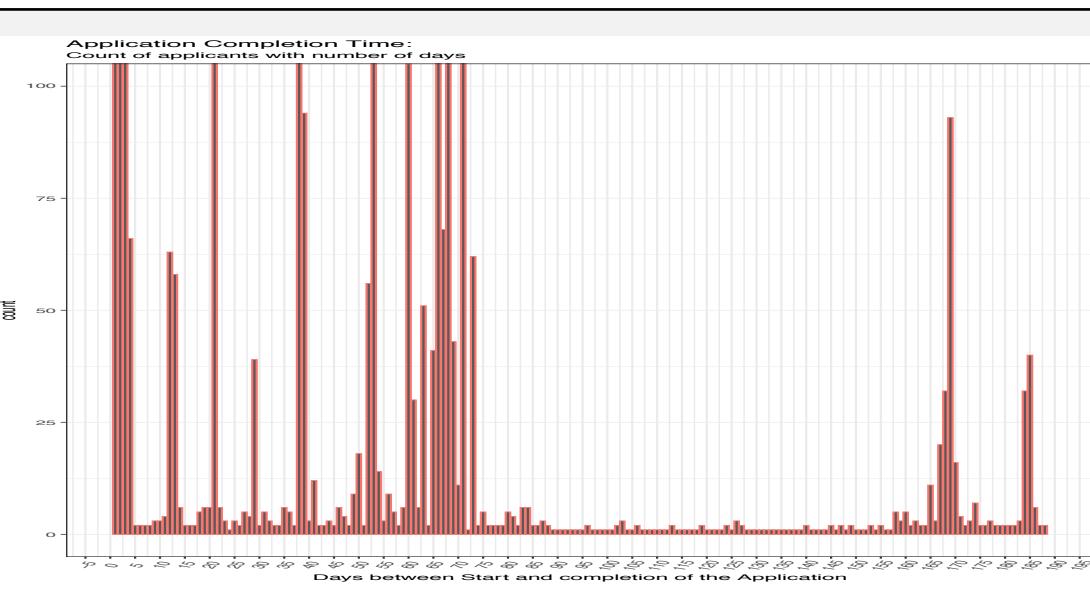
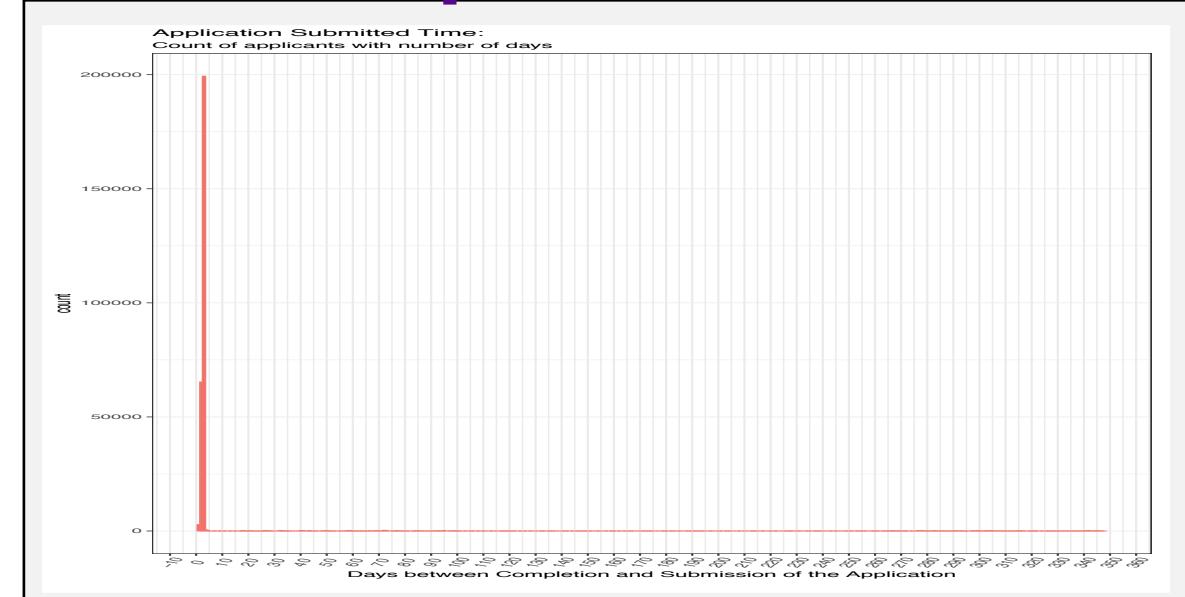
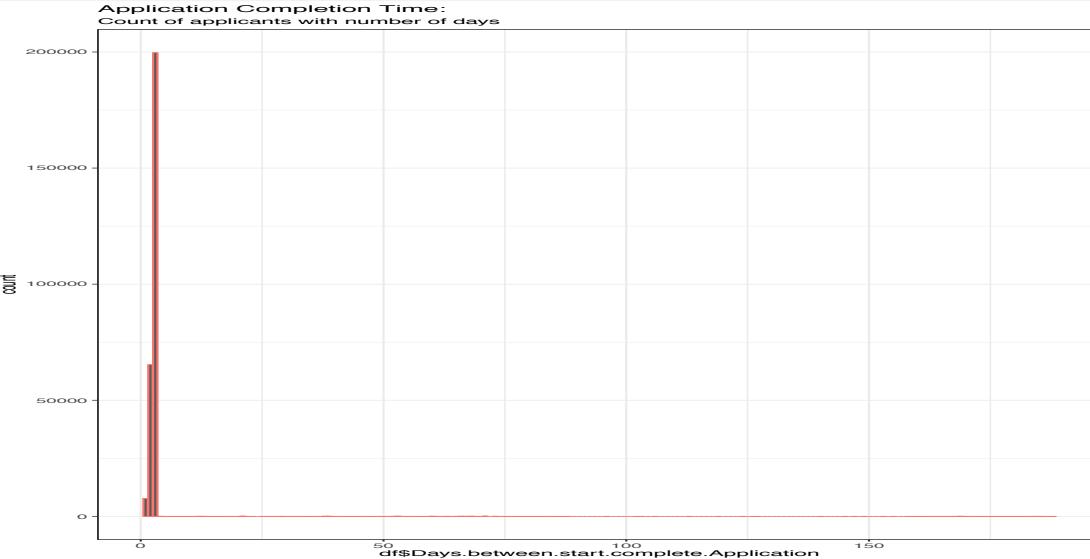
Selection

Attributes

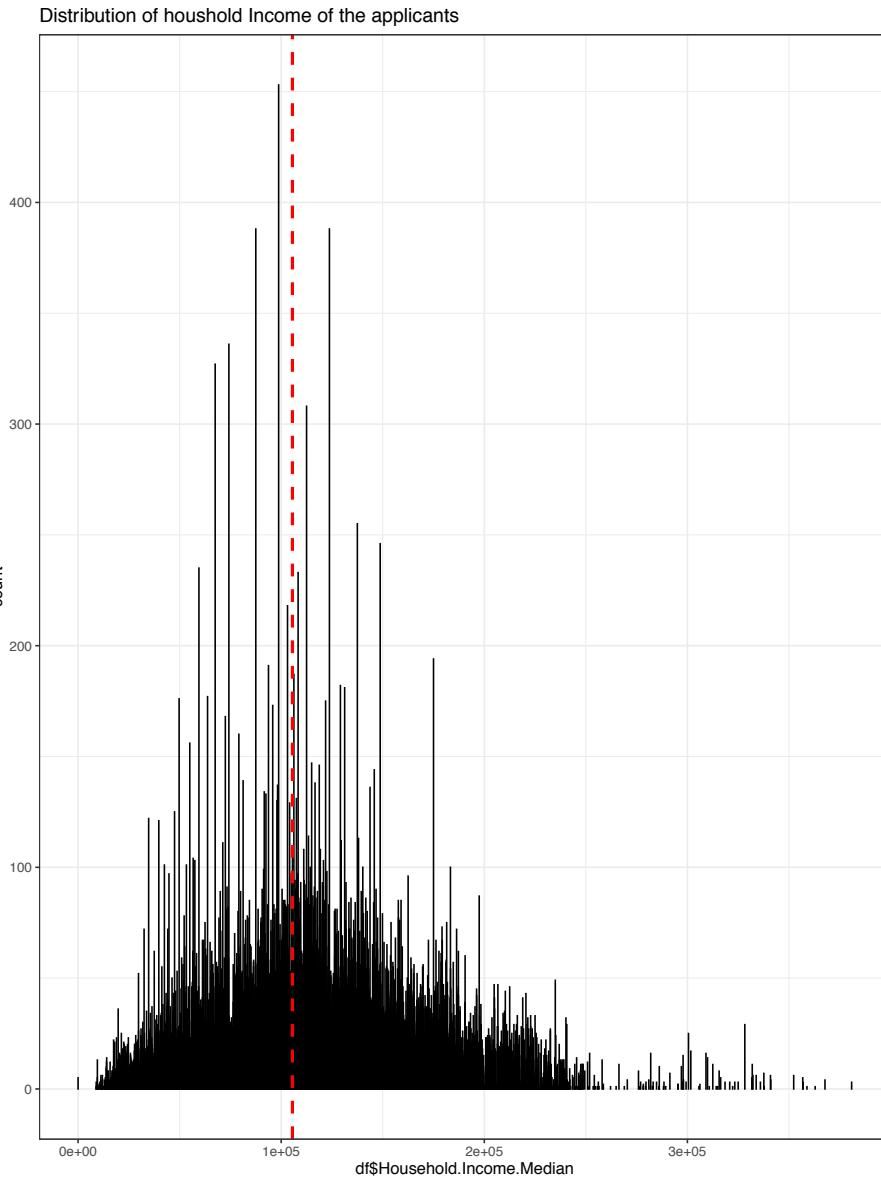
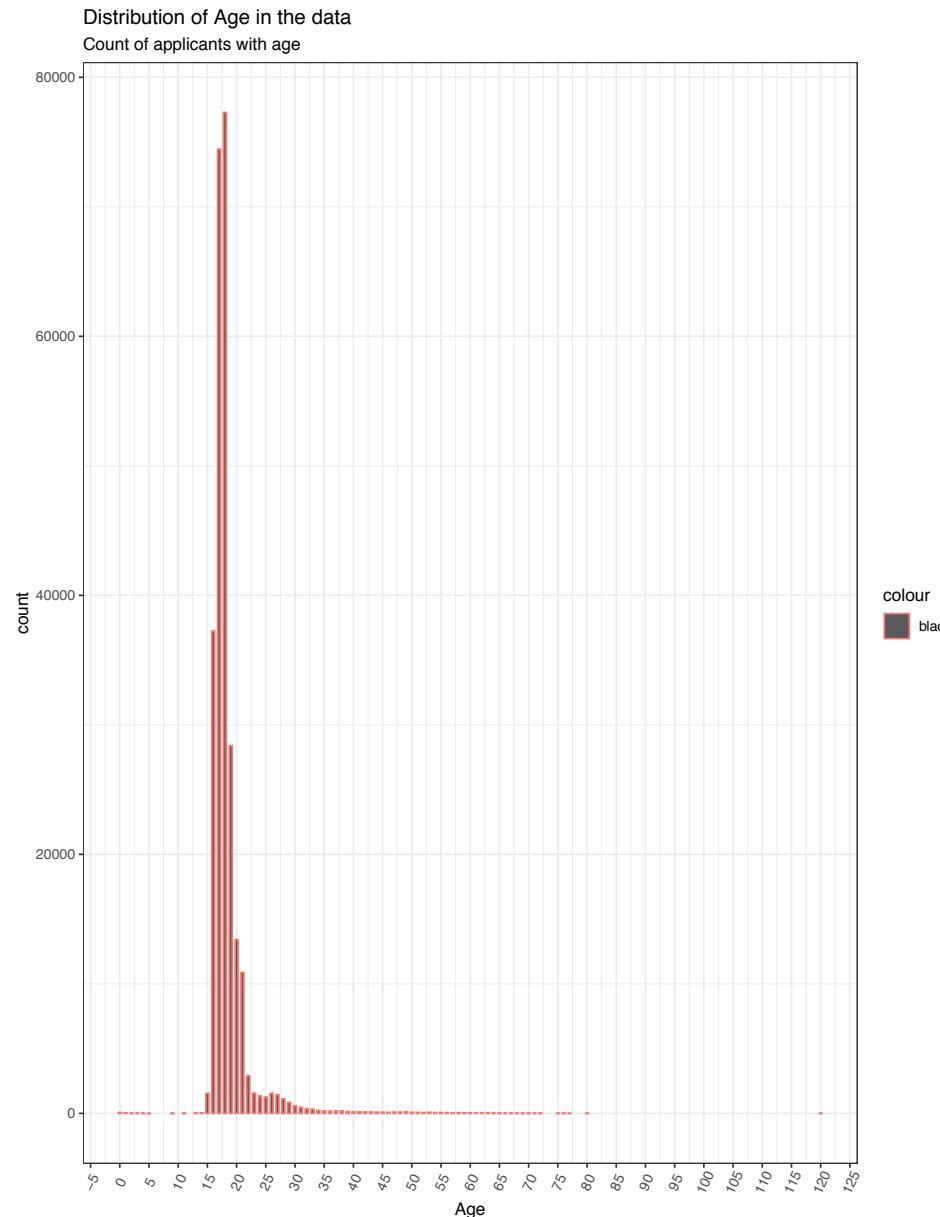
- IDs
- Numbers & Emails

Anomalies Detection and Result

Outliers in Time Submitted and Completion Time



Variabilities within data

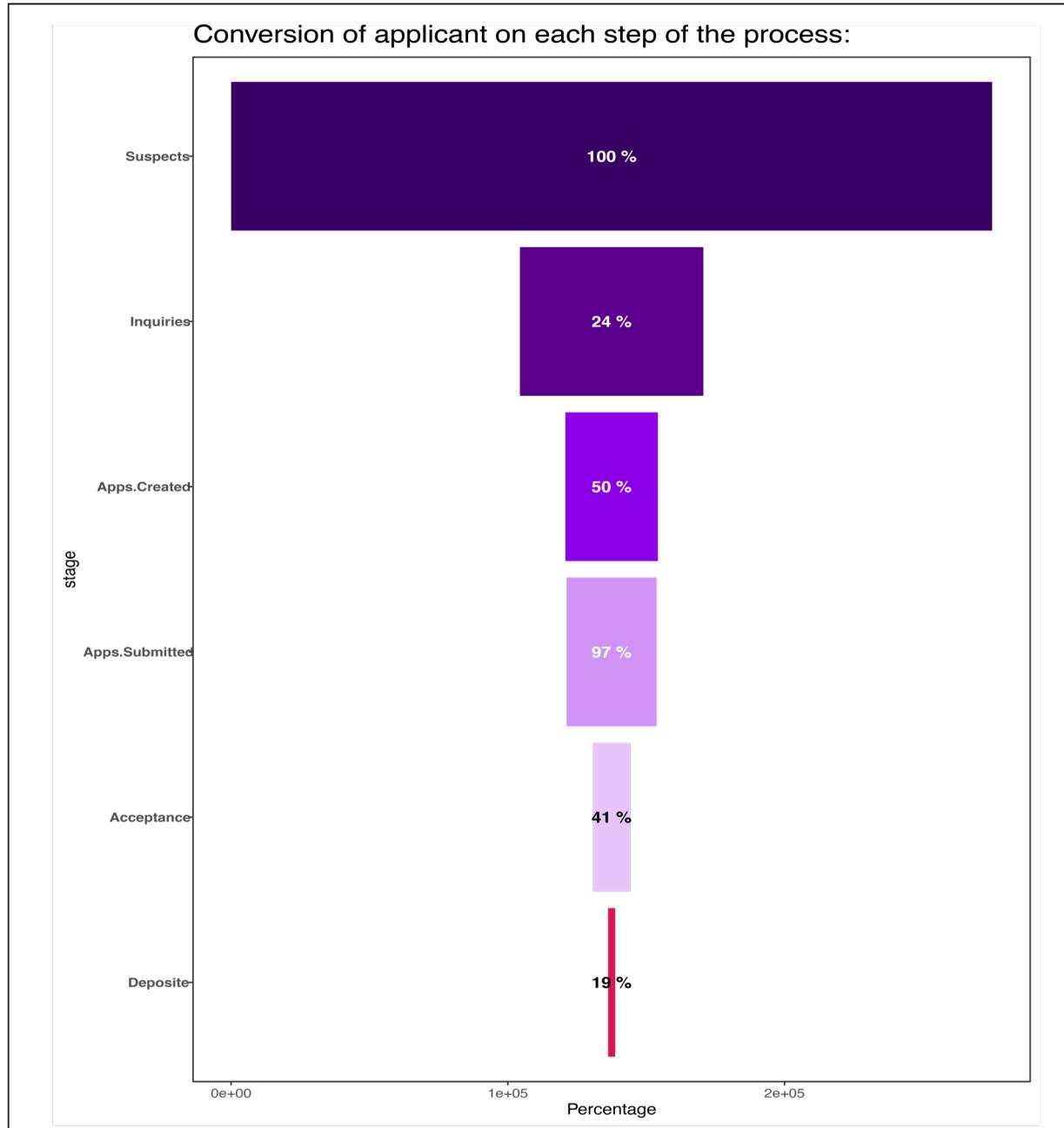
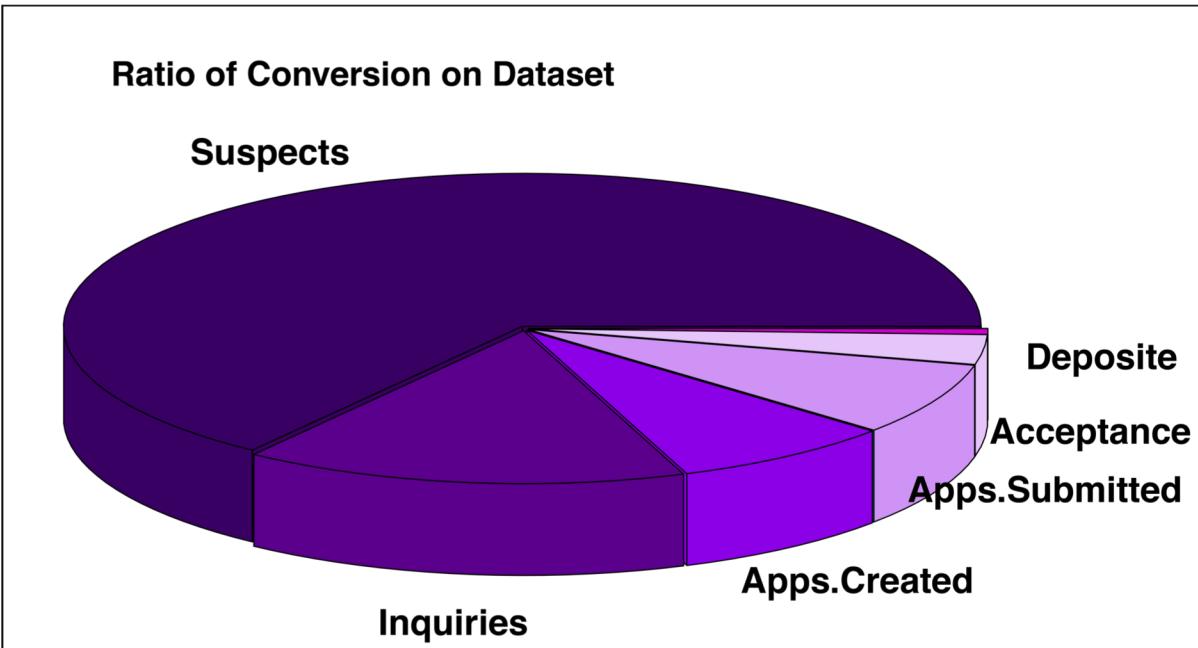


Descriptive Data and Insights

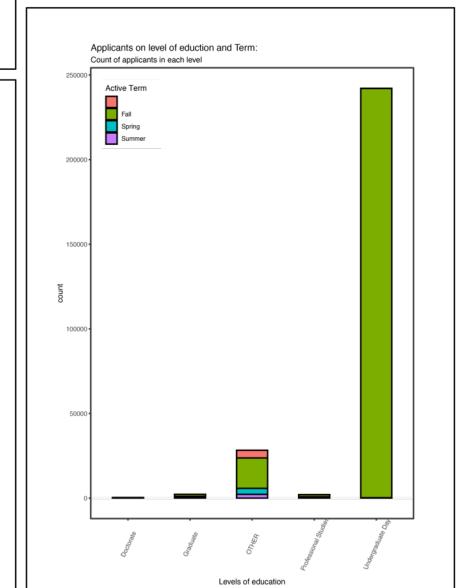
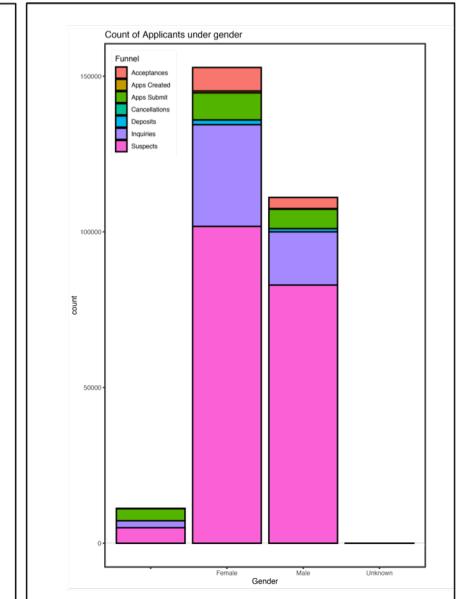
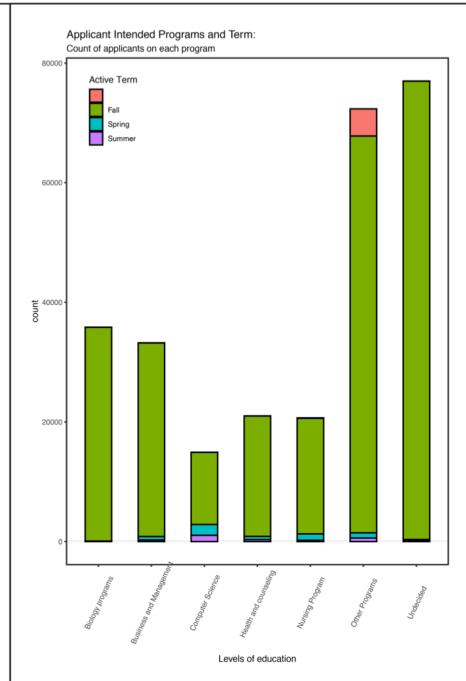
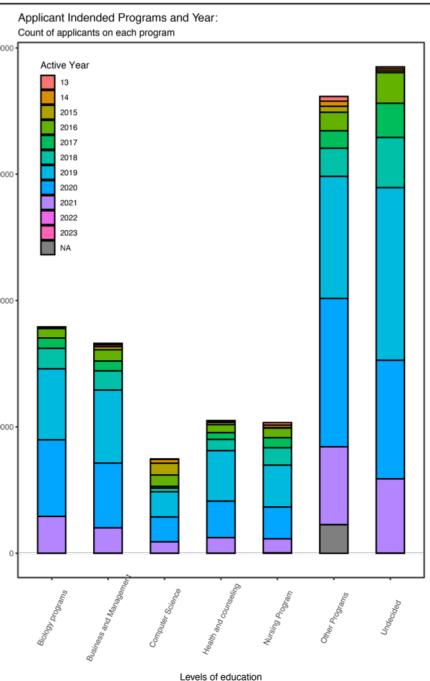
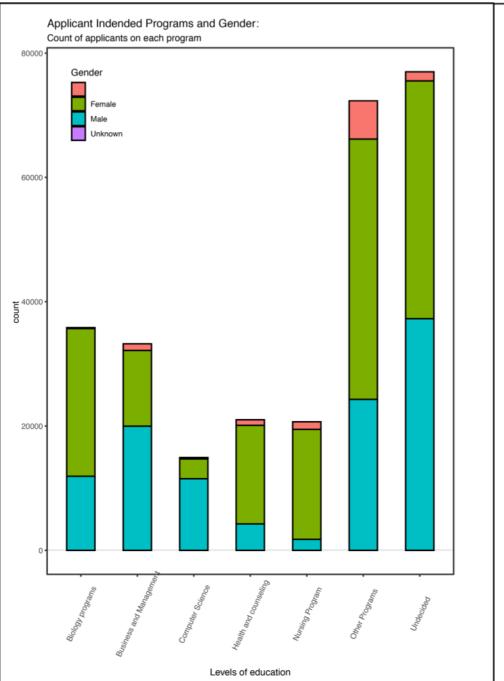
Funnel Analysis

19%

Converted on the final stage; funneled from previous stage



Understanding applicants



Female

More than male

Male

High in Business and CS

Fal

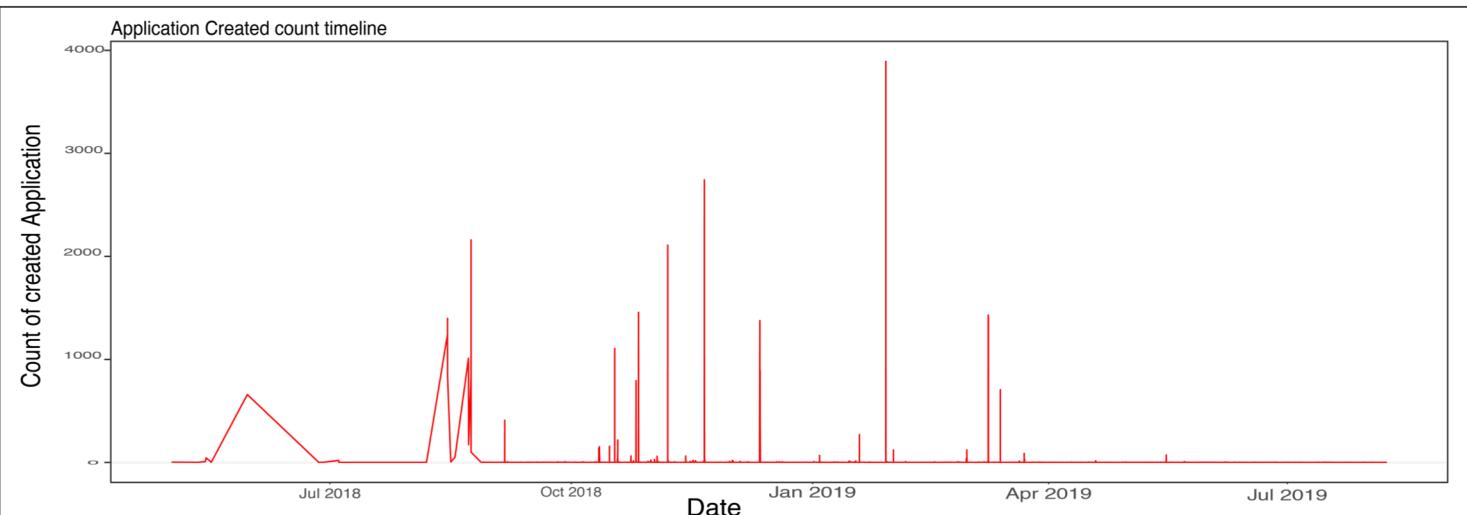
Most applicants

Undergrad

Majority of level of education

Sept - Feb

Time period for most applications



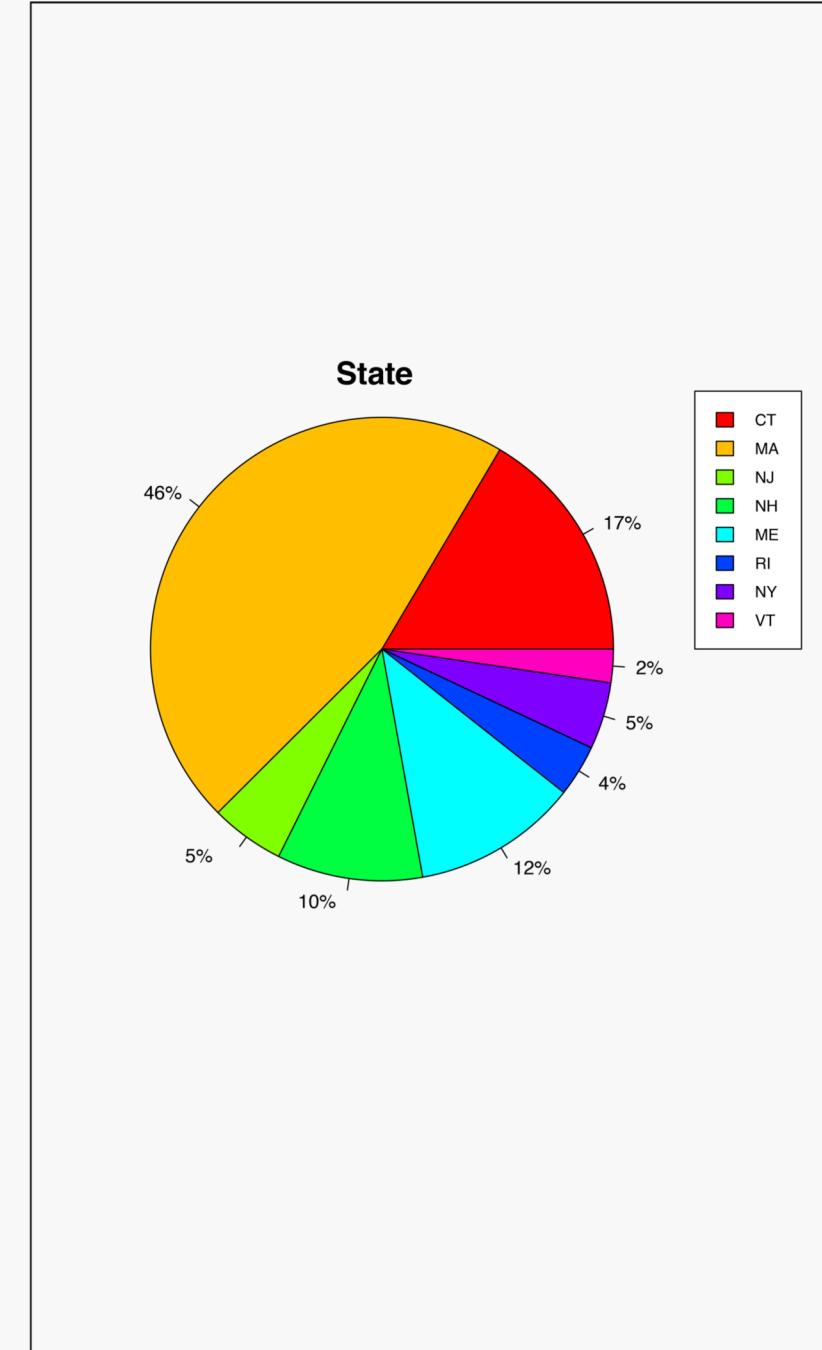
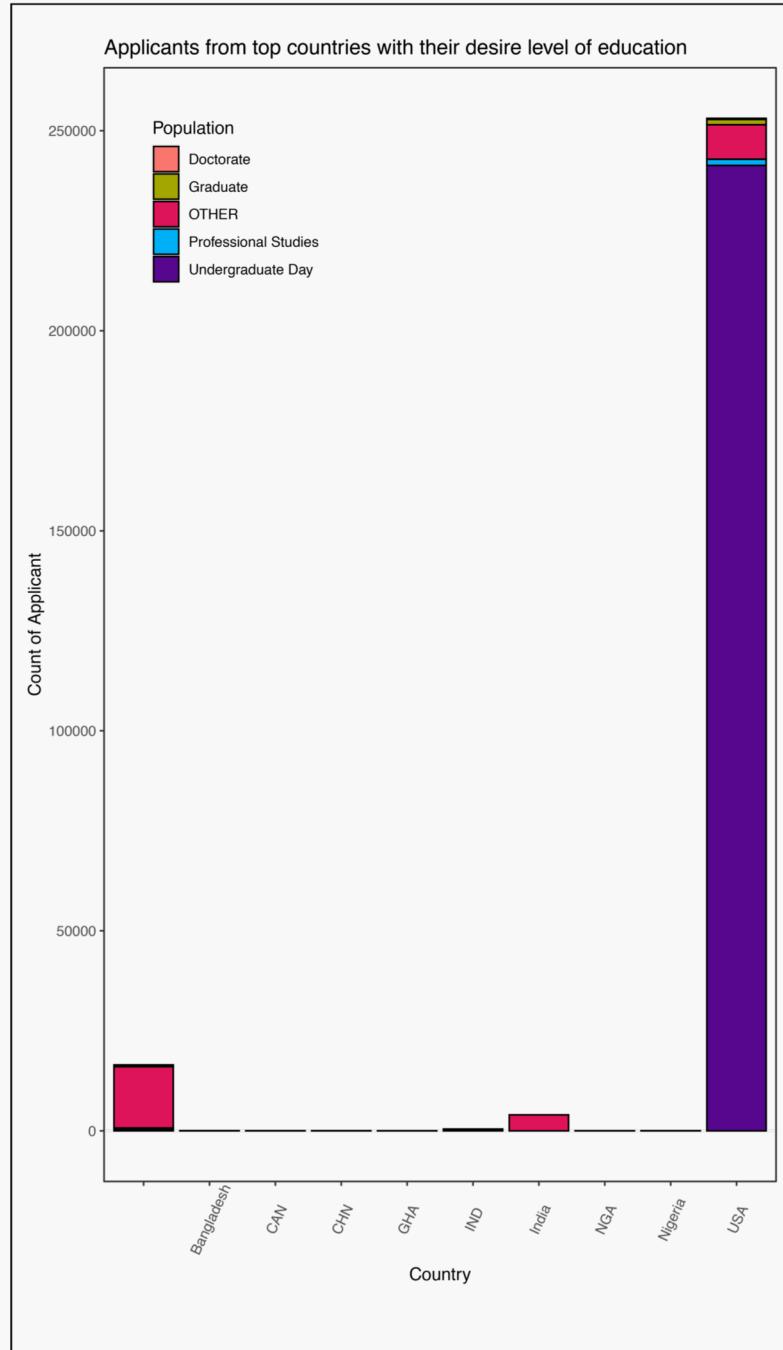
Geo Insights on Applicants

USA

Has the highest number of applicants

MA

Most applicants within USA



College Board

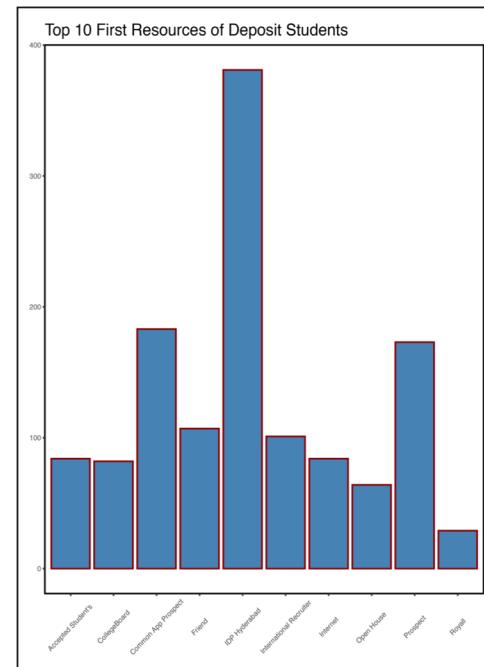
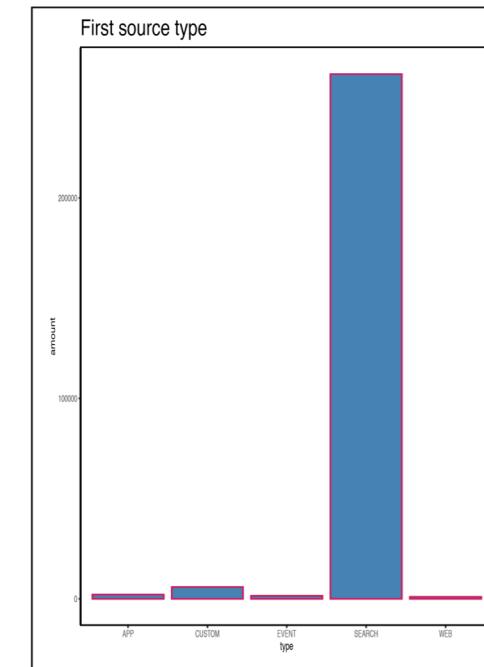
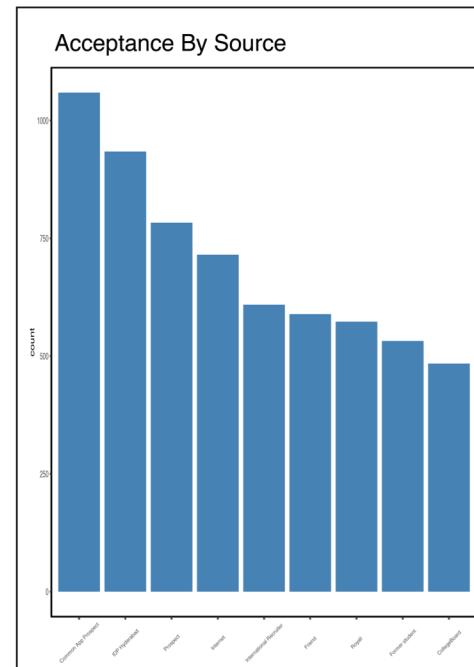
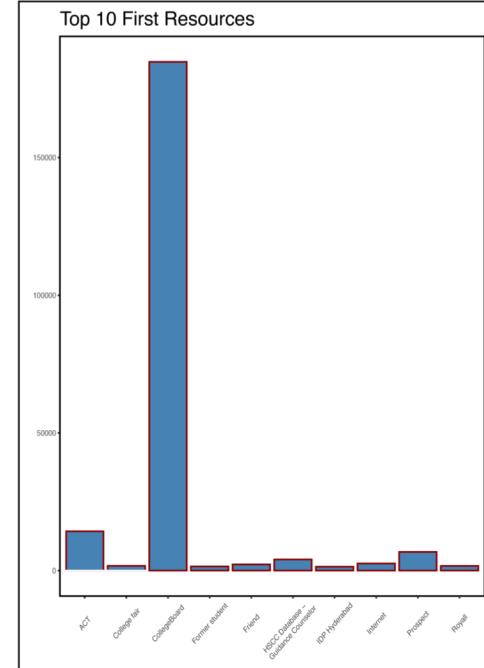
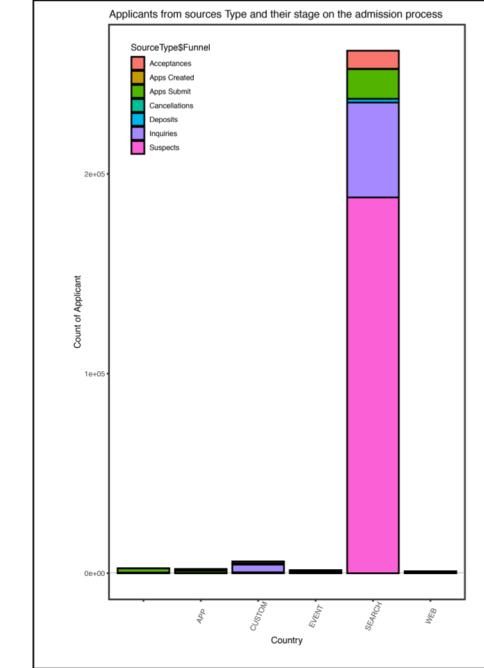
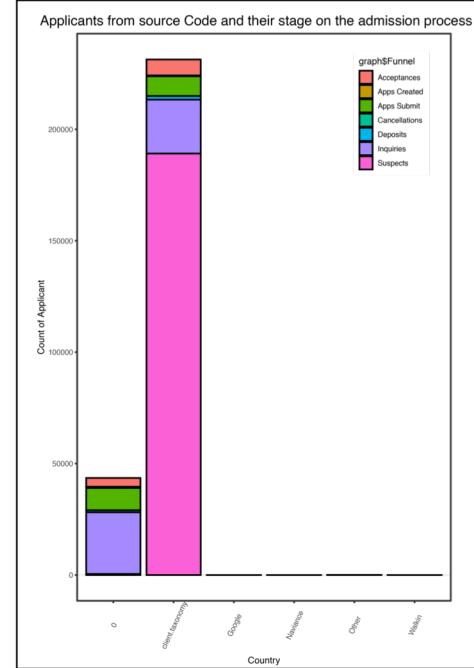
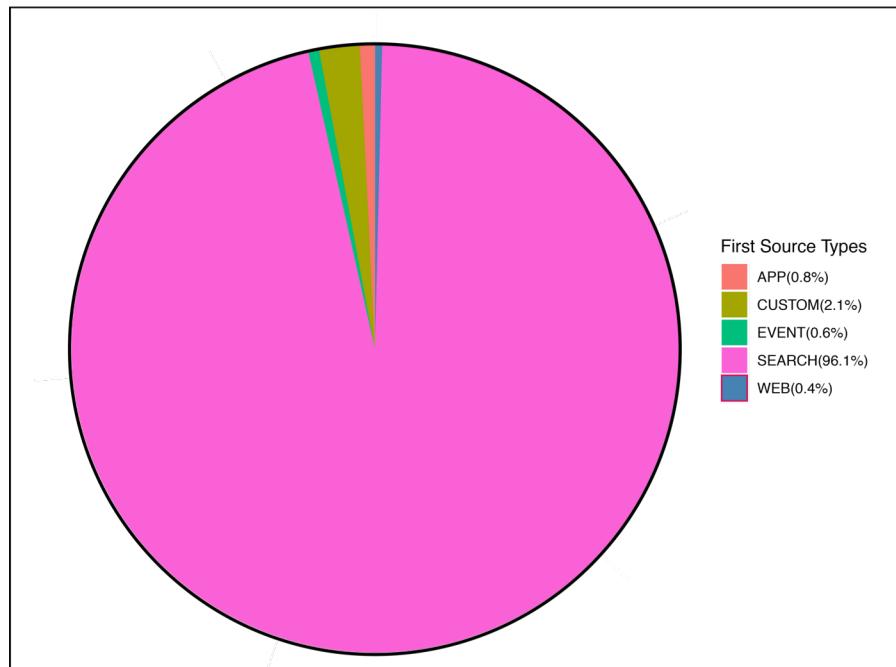
Majority of first source of exposure to colleges

Agency

IDP has the highest conversion rate

96%

Searched their colleges through internet



Marketing Strategy Towards Students

1. Targets & Methods

- USA and India
- College Board (All)
- Agencies (Deposit)
- Male students
- Personalized emails

2. Web Optimization

- Responsive websites
- Mobile compatible website



3. Events

- In States that has the most applicants
- International students info session
- Webinars for students

4. Support

- Helping with application process
- AI to filter out emails with wrong addresses

Thank you
Q&A ☺