Group 5

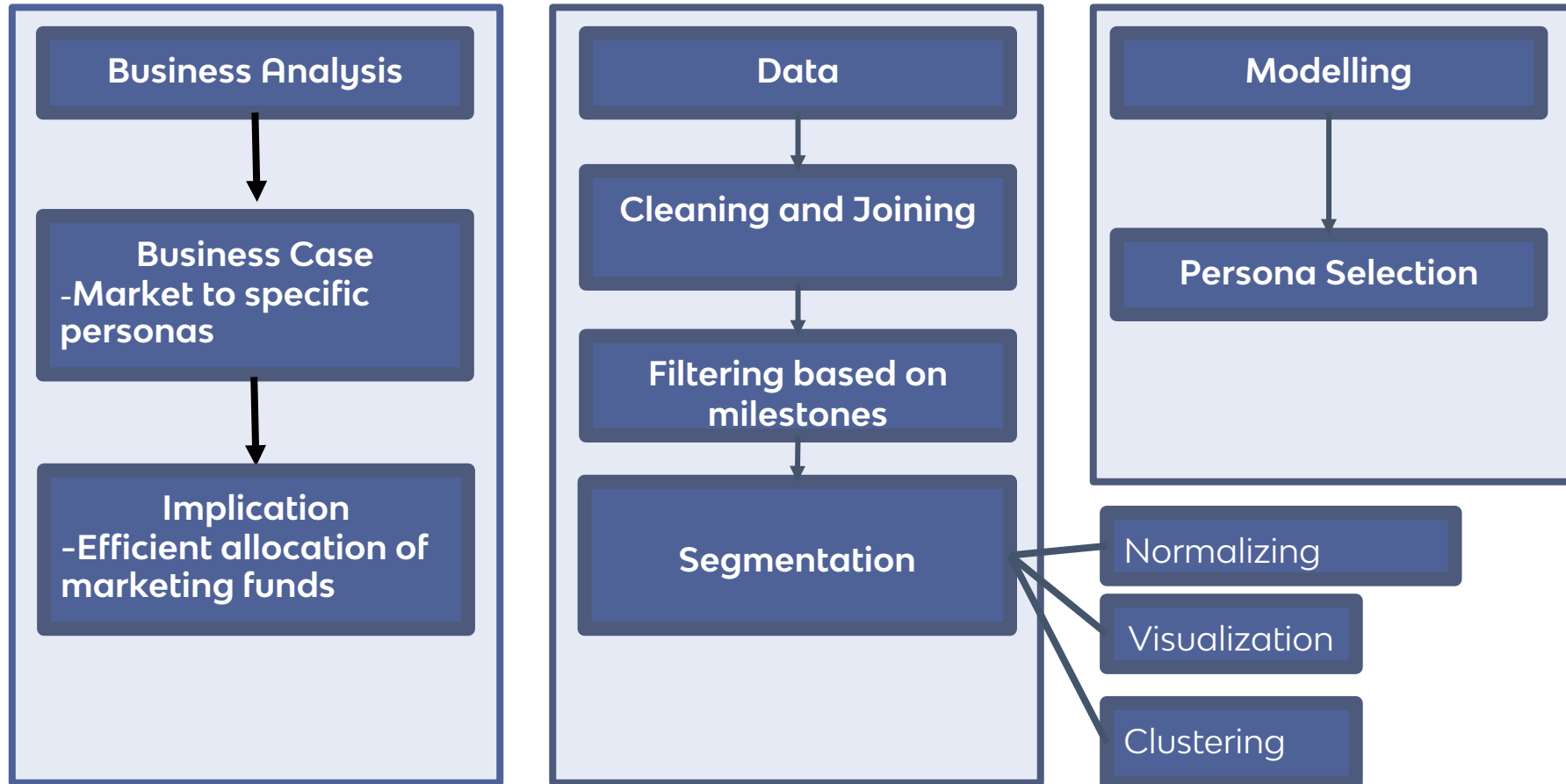Gabriela Caballero   Kunyang Que   Ullas Srivastava   Yangxin Liu

Business Objectives

Problem

Messaging and targeting prospective customers continues to be a resource-intensive effort in marketing operations across the country

Outcome

Allocating funds on candidates who have higher probability to be a good customer

1

2

3

Solution

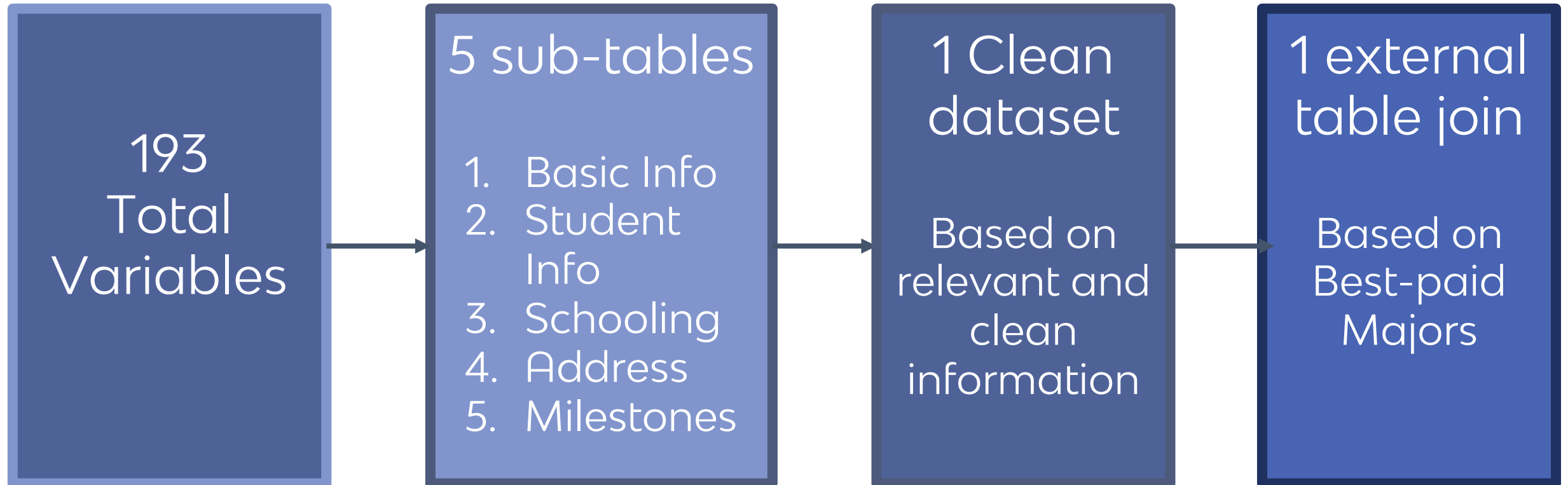Market to specific Personas to run effective and successful marketing strategies

The Process

Data Cleaning

- Divided the big dataset in batches after cleaning out the missing data and outliers
- Did the analysis on each batch to find the most relevant fields and merged the batches to form a cleaner and larger dataset
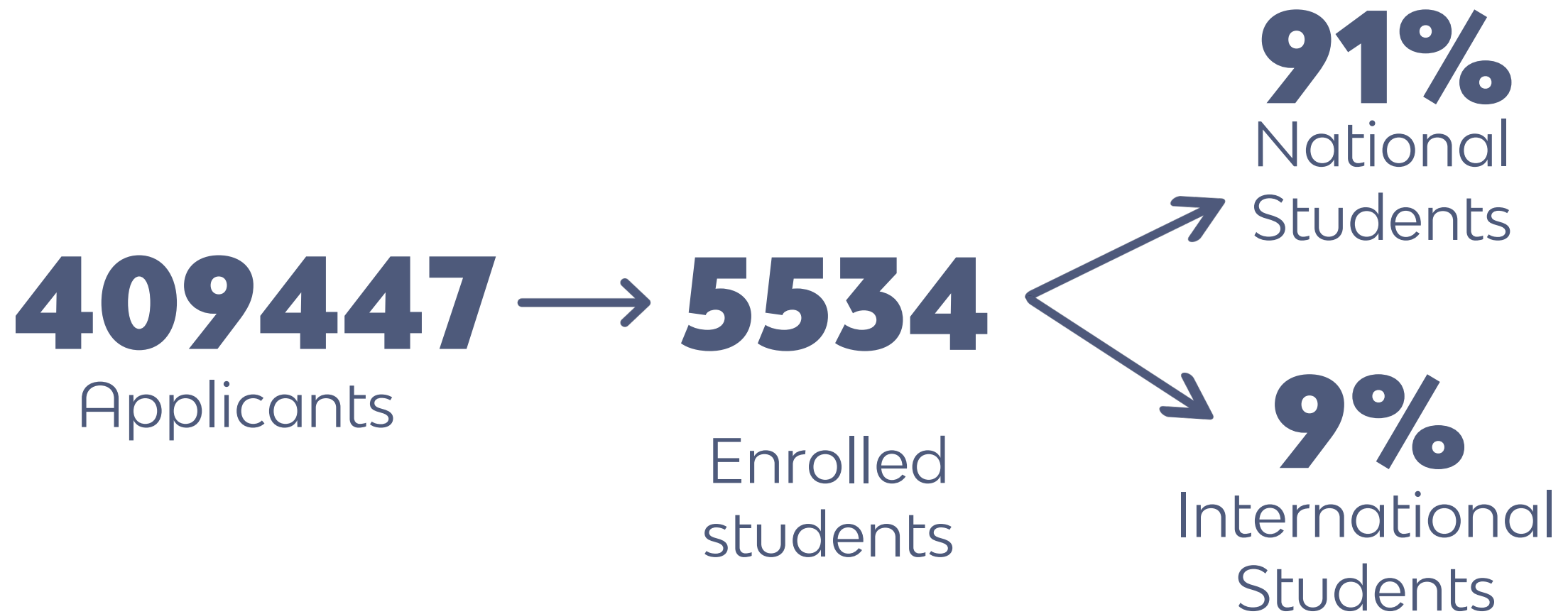
193 Total Variables	5 sub-tables 1. Basic Info 2. Student Info 3. Schooling 4. Address 5. Milestones	1 Clean dataset Based on relevant and clean information	1 external table join Based on Best-paid Majors

Applicants Distribution Overview

Map drawn using OpenStreetMap library

International vs. National Students

409447 → **5534**
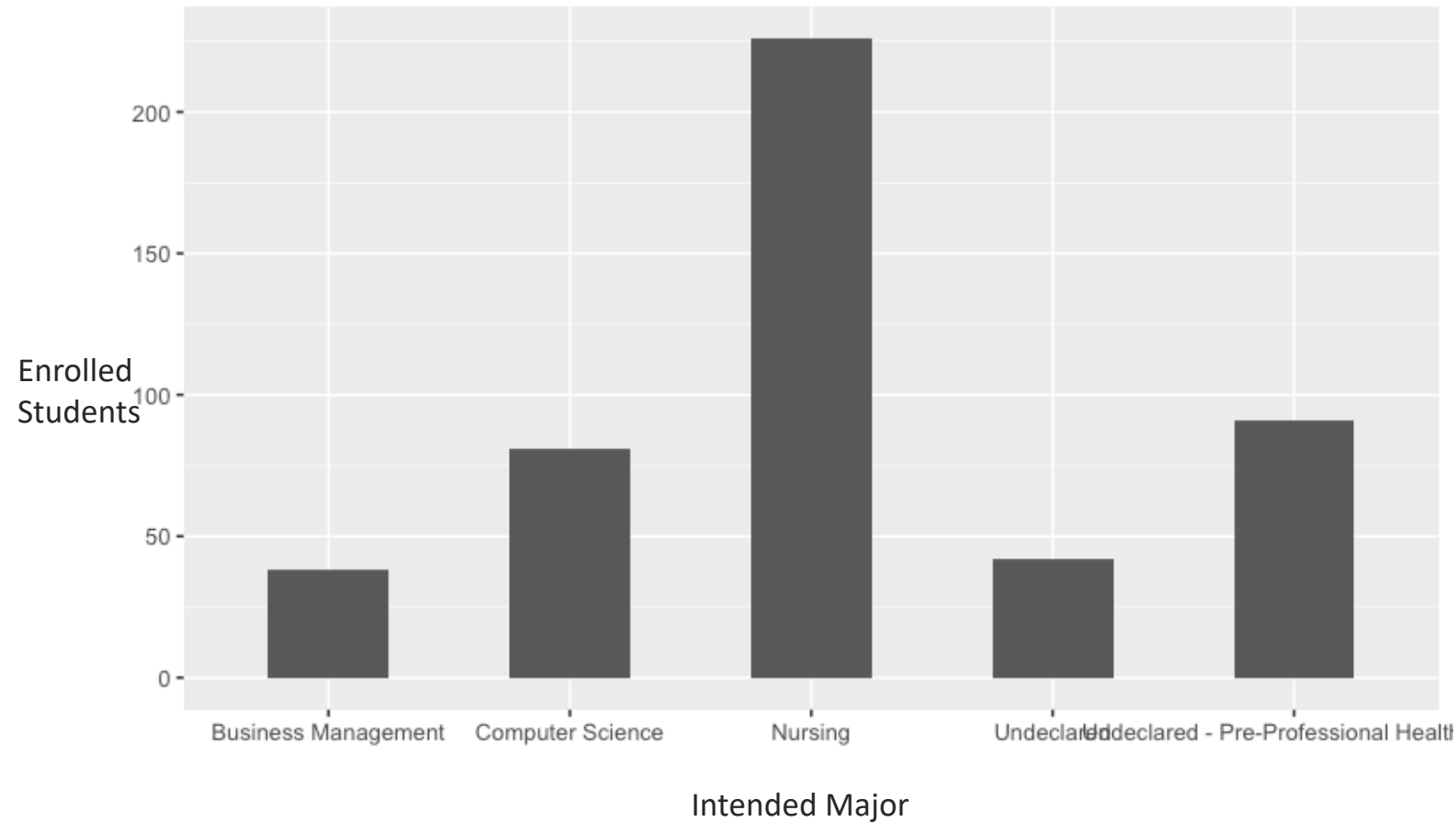
Applicants

Enrolled students

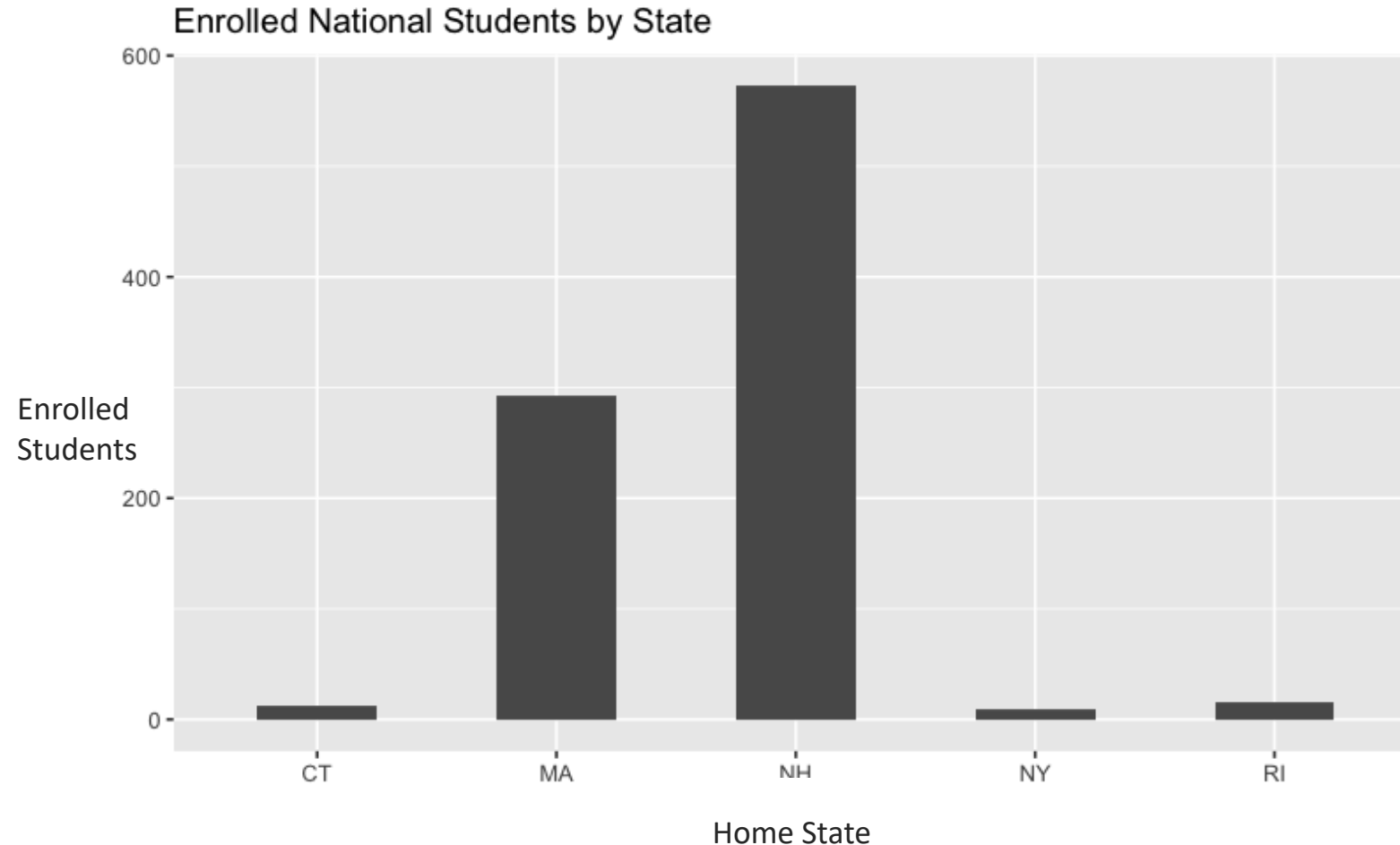**91%**
National Students

9%
International Students

National Students

Enrolled National Students by Major

Nursing

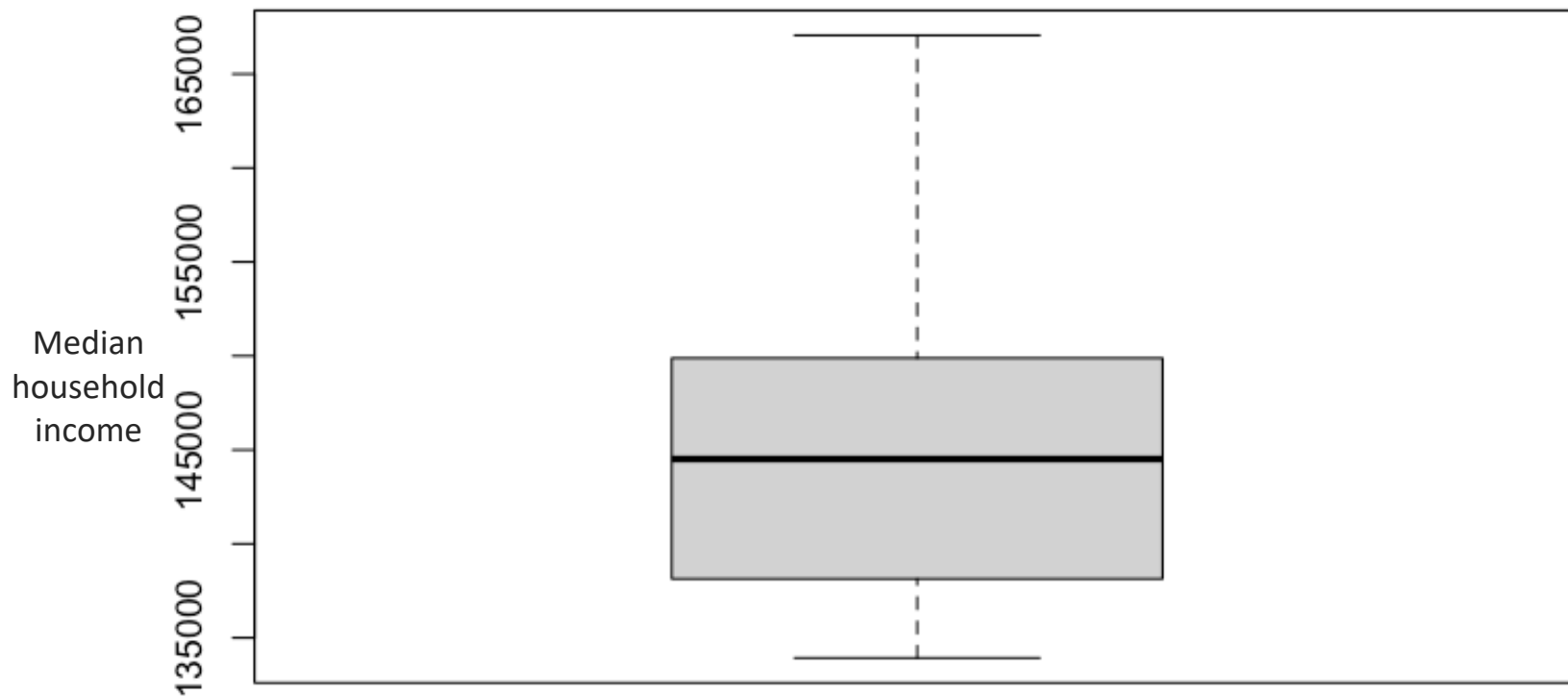Most Popular Major among National Students

National Students

Enrolled National Students by State

New Hampshire

Most national enrolled students are in-state student

National Students

$ **$145,973**

Avg. median household income removing those that were more than 1sd from the mean
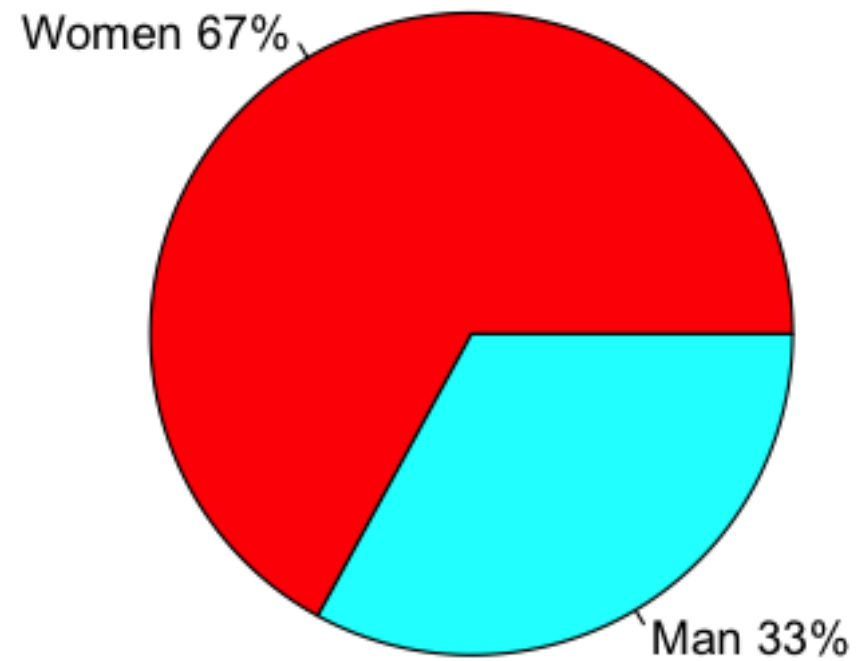
National Students
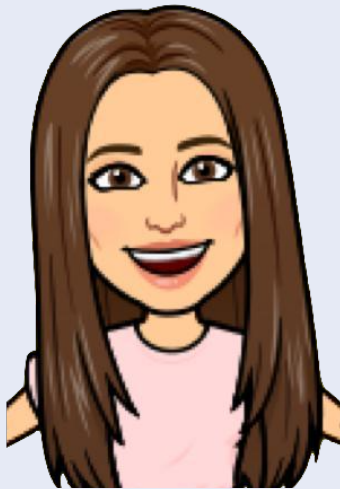

Avg.Age

20

Avg. age removing outliers

National Students

Female vs. Male National Students

Women 67%

Man 33%

Persona 1

Rachel

National Student

From New Hampshire

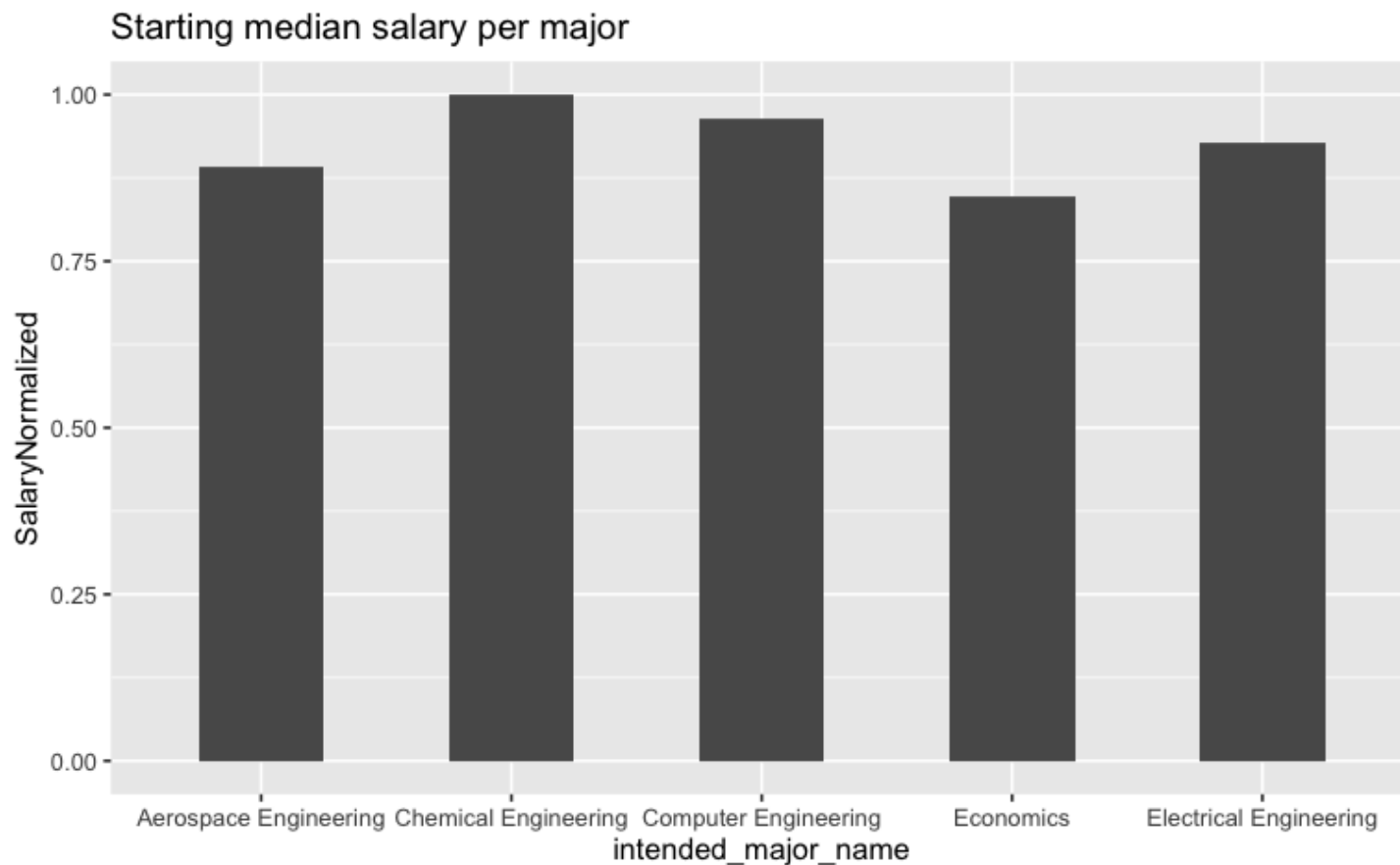20 years-old

Wants to pursue a degree in Nursing

Median income: $145,973

Female

Marketing strategy: No need to invest in advertisement for her since she represents most of our applicants that end up being enrolled.

Best-Paid Majors-external data

Starting median salary per major

Chemical Engineering

Major with the highest Median Mid-Career Salary

Best-Paid Majors and National Students

Riv

$102,920

Mean median mid-career
Salary

$52,000

Median mid-career salary
for education majors

Education

Least Popular Major
among National Students

Persona 2

Monica

National Student

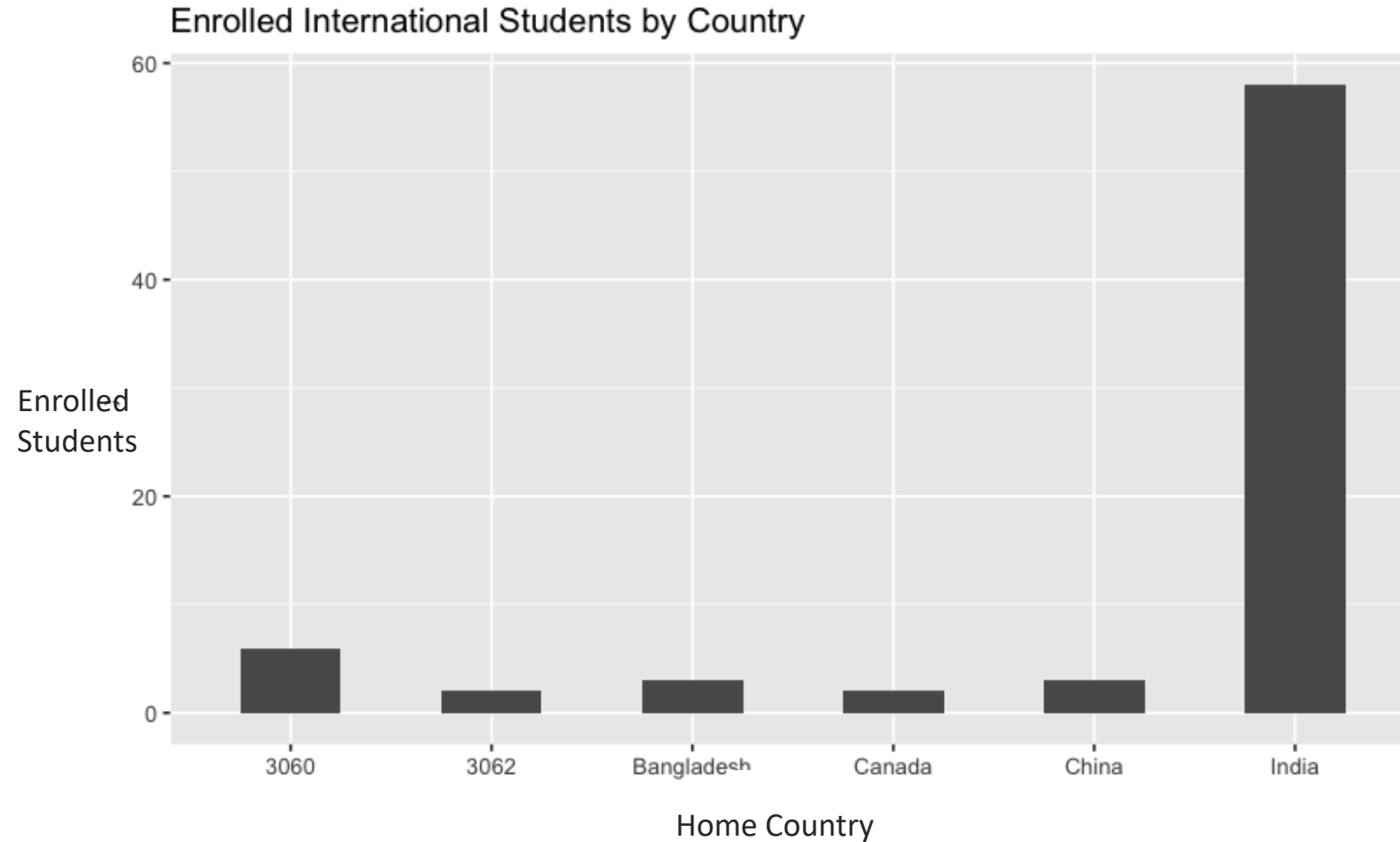From New Hampshire

20 years-old

Wants to pursue a degree in Education

Median income: $145,973

Female

Marketing strategy: The median salary for her intended major is below the mean median salary for all majors and below her current income. We should approach her with scholarships offerings.
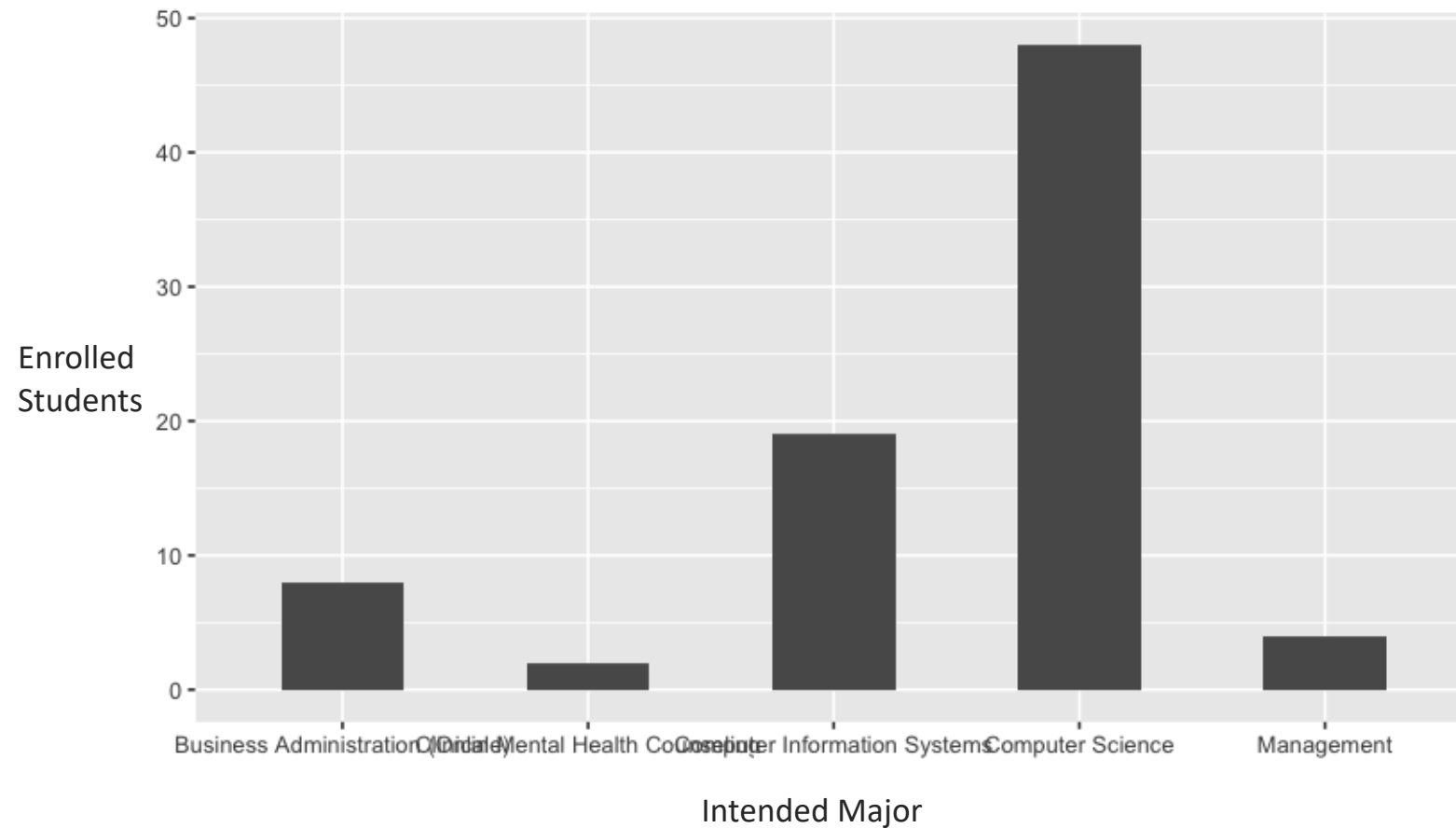
International Students

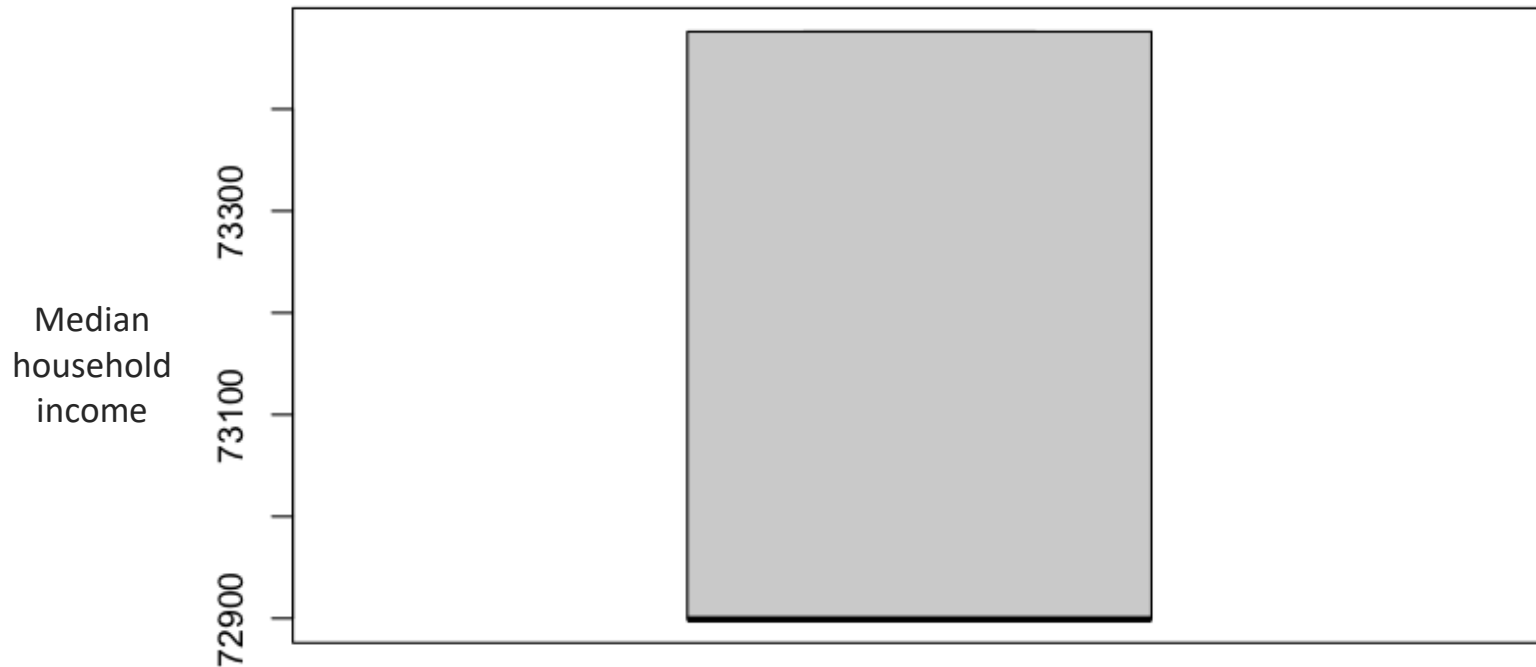Enrolled International Students by Country

India

Most international students are from India

International Students

Enrolled International Students by Major

Computer Science
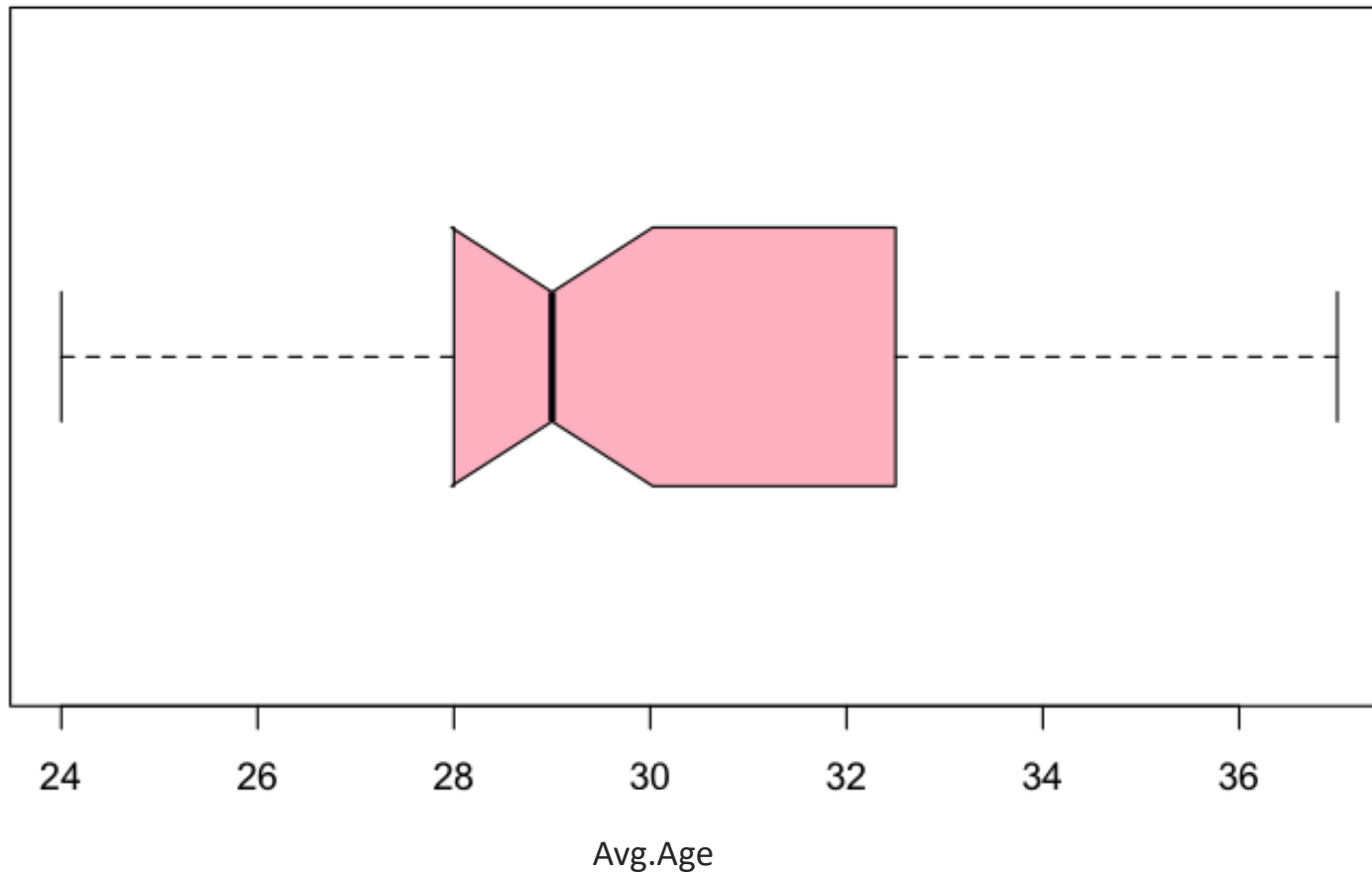
Most Popular Major among International Students

International Students

$ **$74,952**

Avg. median household income removing those that were more than 1sd from the mean
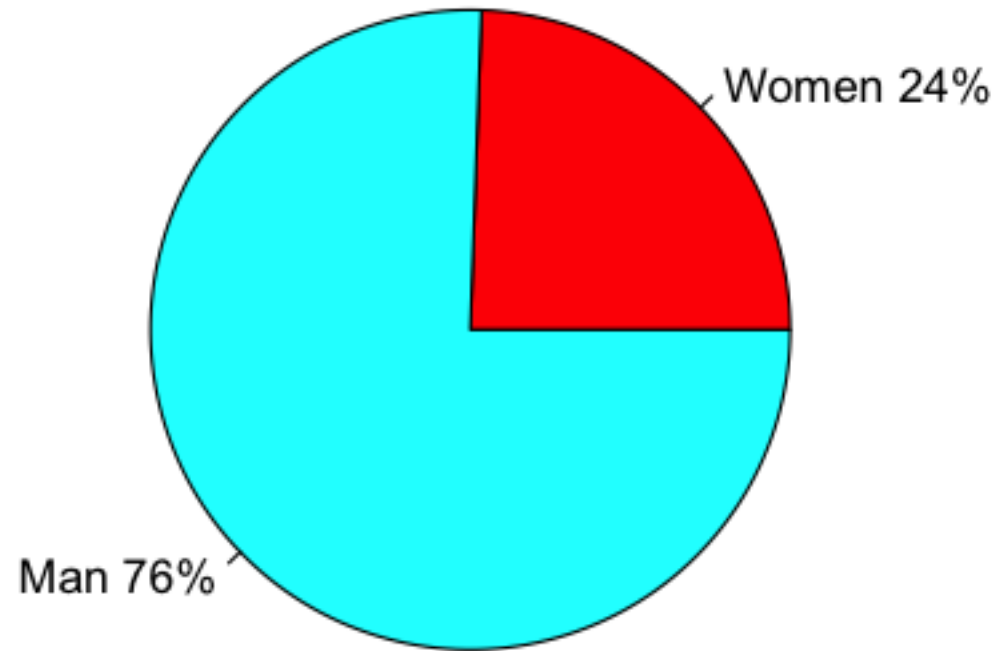
International Students

30

Avg. age removing outliers

Avg.Age

International Students

Female vs. Male International Students

Women 24%

Man 76%

Persona 3

Ramesh

International Student

From India

30 years-old

Wants to pursue a degree in CS

Median income: $74,952

Male

Marketing strategy: Approach him offering visa sponsorship and scholarship offerings. A better marketing strategy needs to be directed at him to increase the % of international students.

Most Popular Majors

Applicant Students by Major

409447
Applicants

+15%

Wants to pursue a degree in Liberal Studies
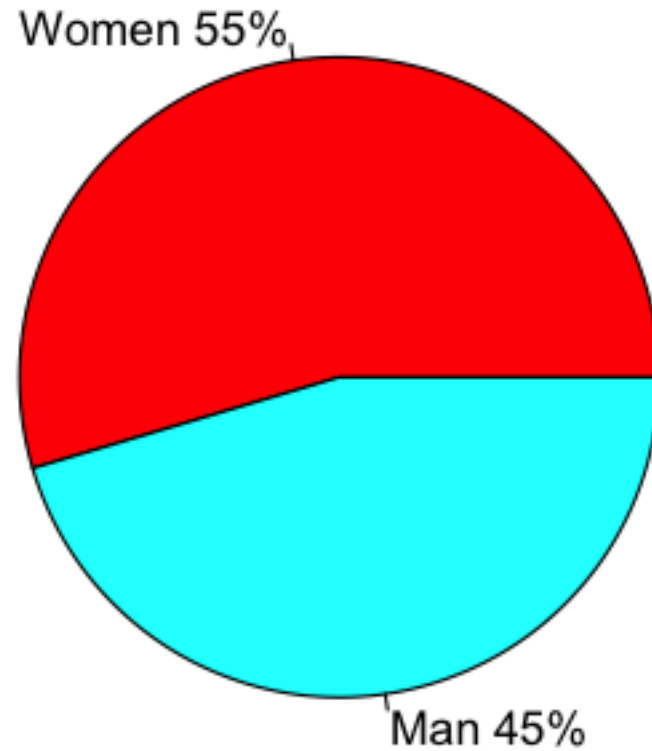
Liberal Studies Applicants
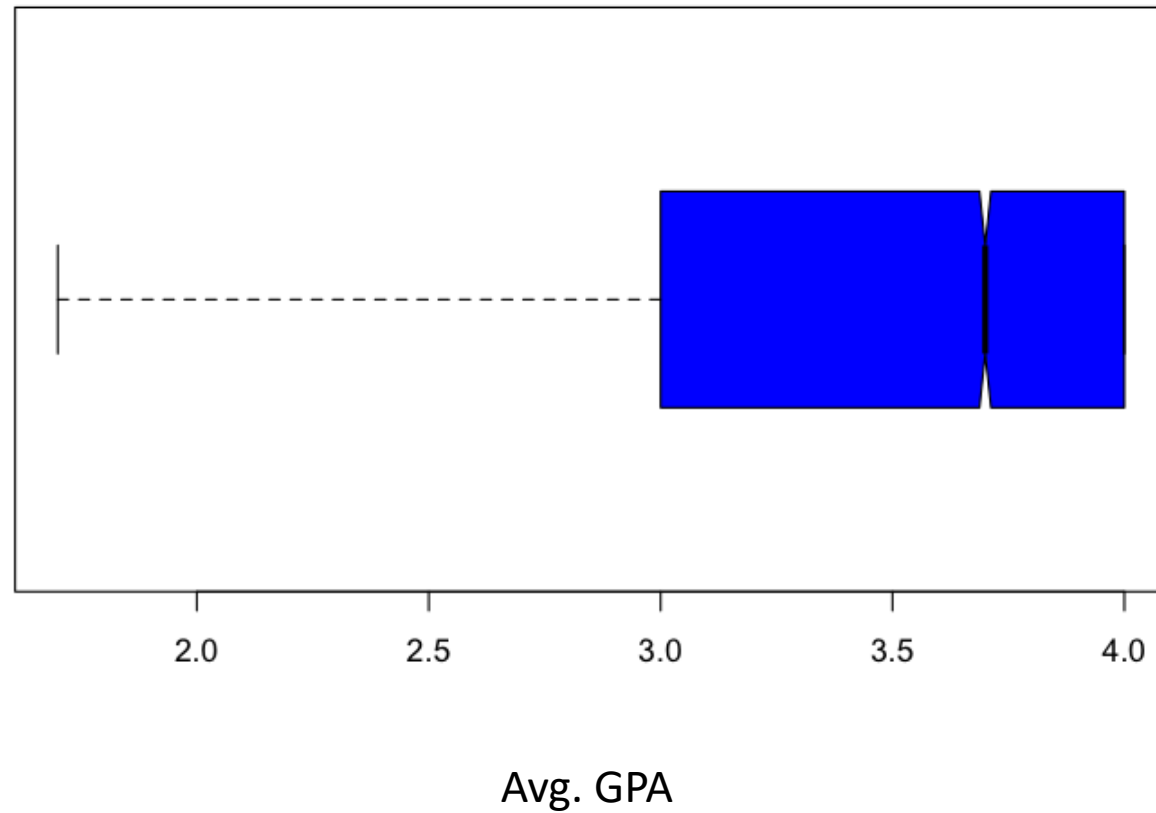

Applicants to Liberal Studies per State

📍 **Massachusetts**

Most of Liberal Studies applicants are from Massachusetts
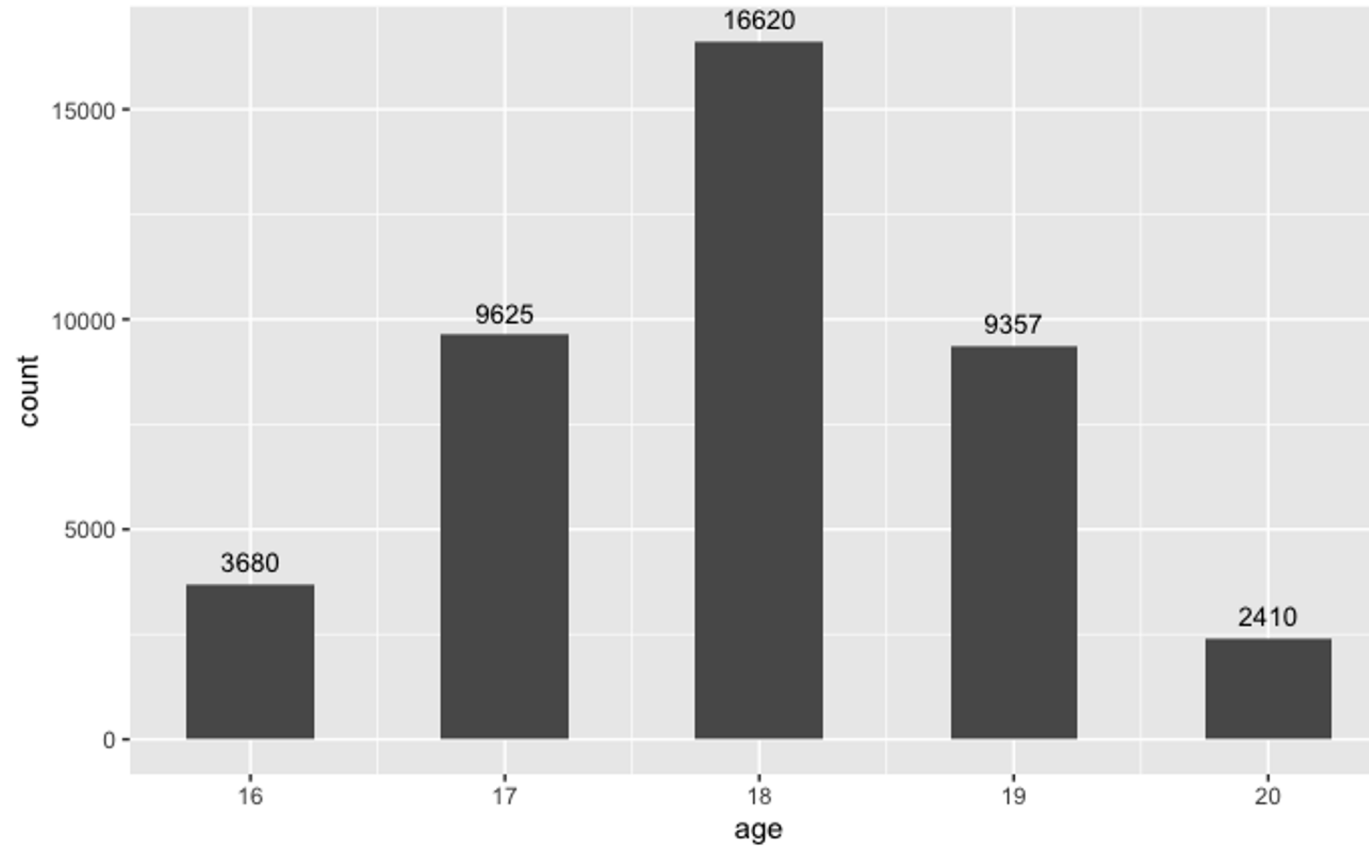
Liberal Studies Applicants

Female vs. Male Liberal Studies Students

Women 55%

Man 45%
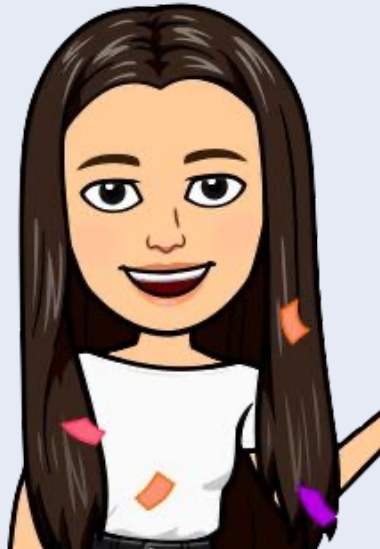
Liberal Studies Applicants

Avg. GPA

Age Distribution of Liberal Studies Applicants

Persona 4

Wendy

National Student

From MA

3.34 GPA

18 years-old
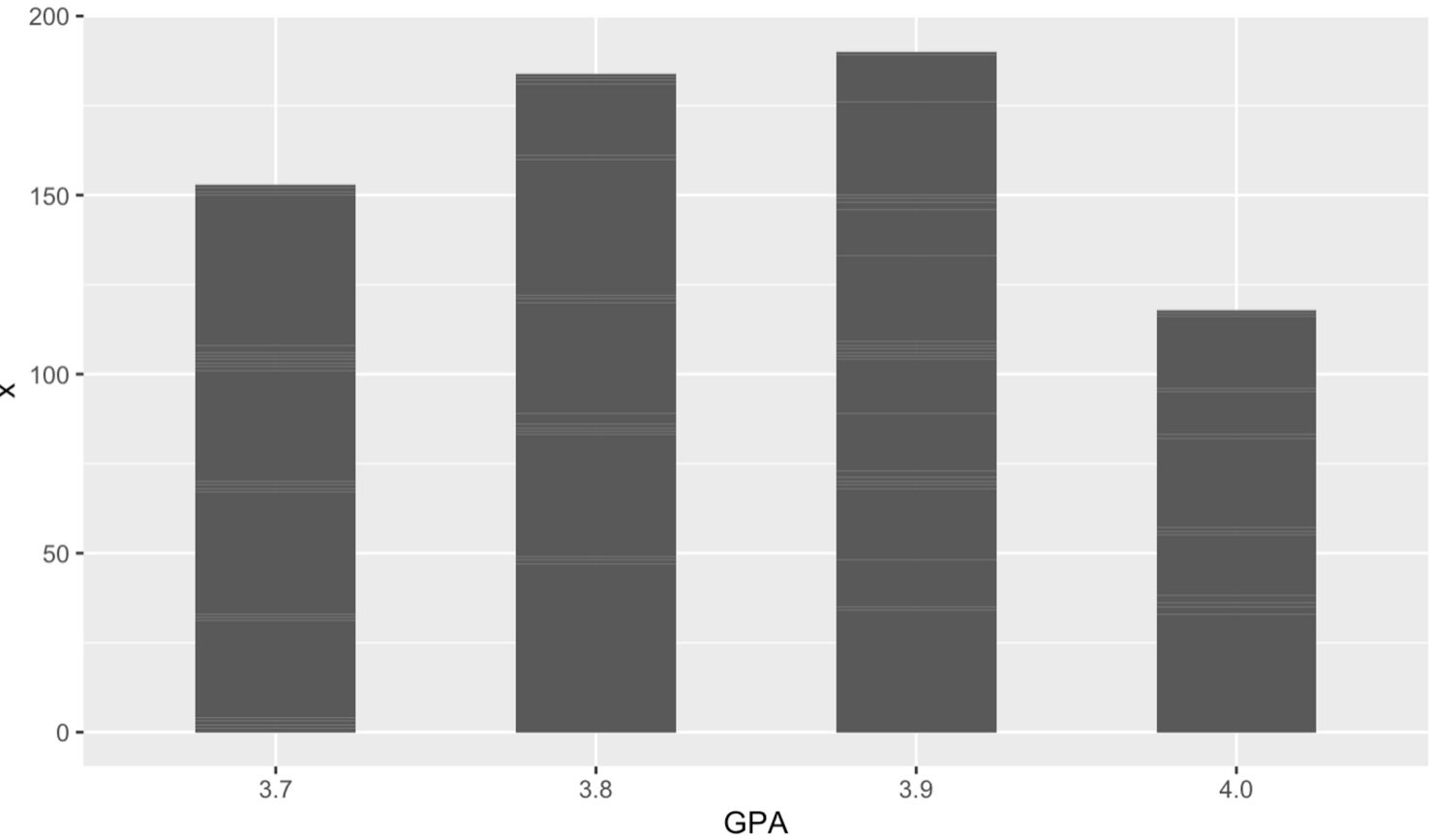
Wants to pursue a degree in Liberal Studies

Median income: $ 145,973

Female

Marketing strategy: Liberal Studies as a major doesn't need promotion since it is the most popular one among candidates, however, it is one of the least popular ones among enrolled students. We could try to understand why applicants don't end up being enrolled.
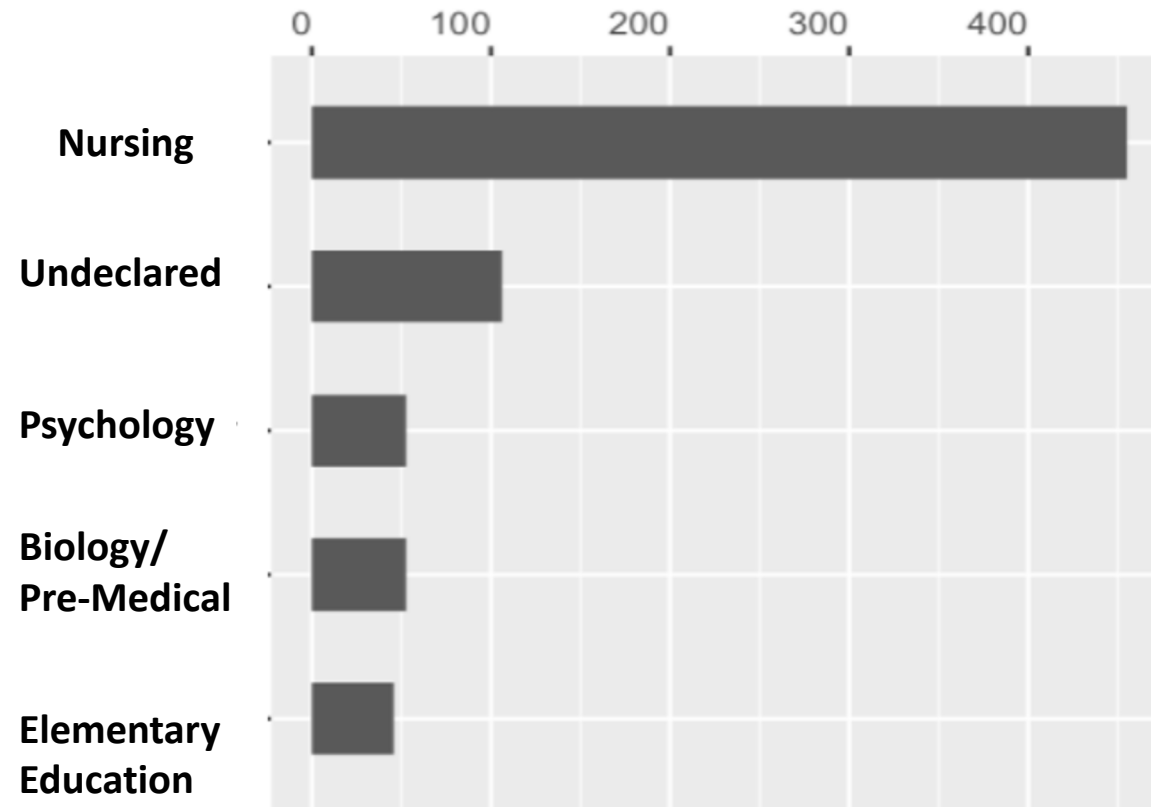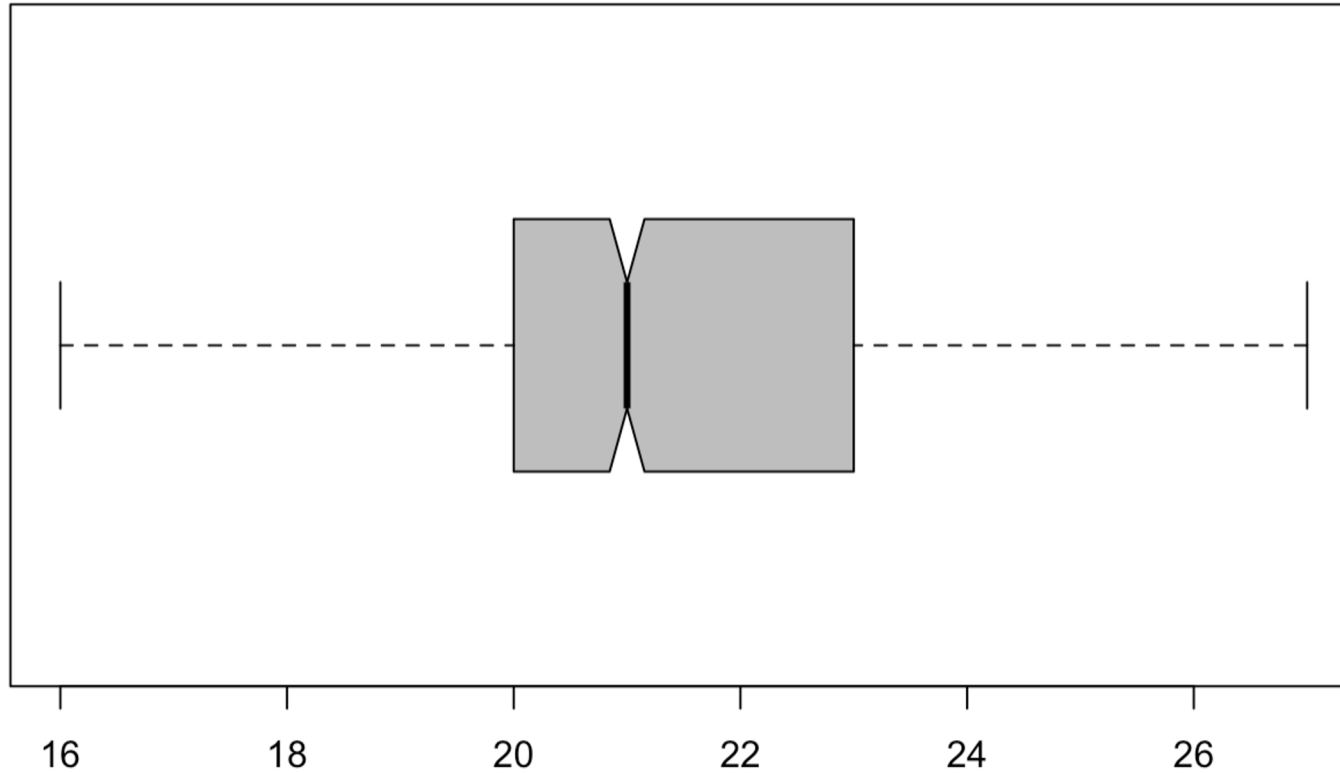
Students with the best GPA in HS

30%

3.9

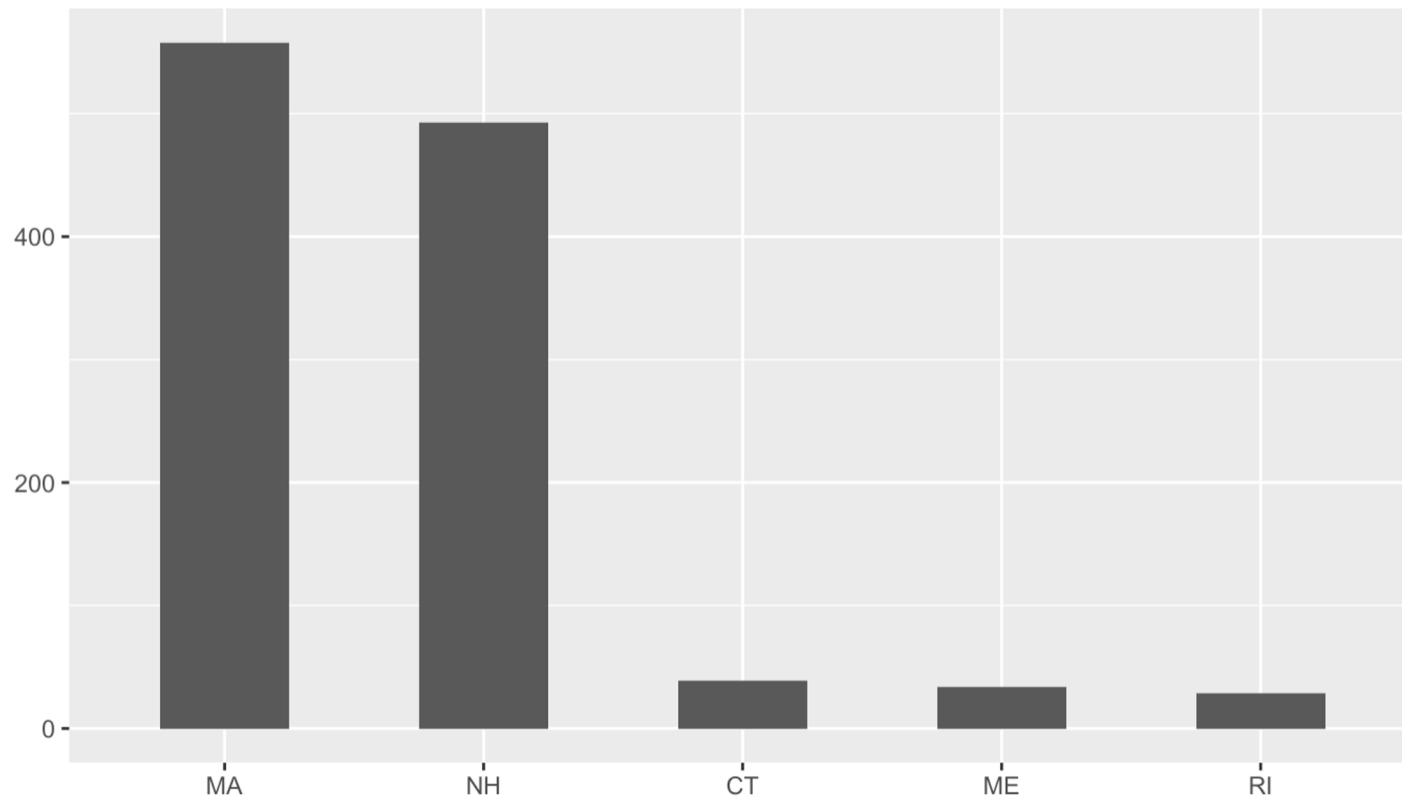# Top 5 Chosen Majors by Them

TOP 1
Nursing

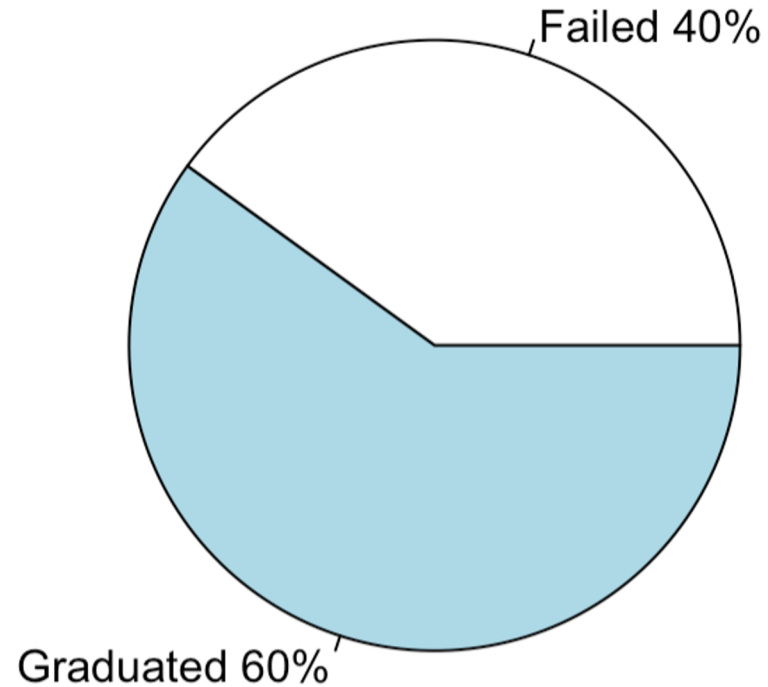# Best HS GPA Students' age

21
Avg. age removing outliers

5 States with the Most A

MA,
Massachusetts

Most students get an A in high school are from Massachusetts.
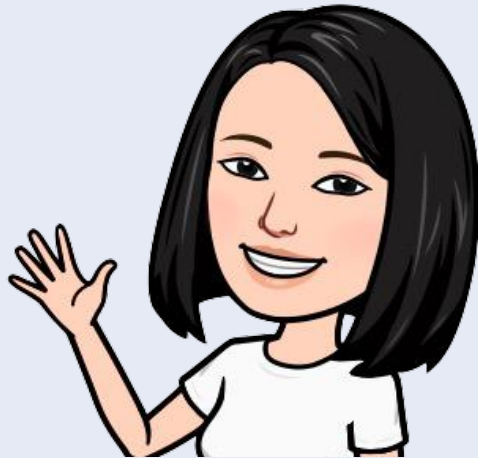
**Grade A Students
"College Graduation"**

60%

Graduation

Persona 5

Sarah

National Student

Wants to pursue a degree in Nursing

From MA

21 years-old

3.9 GPA

Female

Marketing strategy: 1. Nursing major can target students with high GPA in MA and NH since most grade A students who are interested in nursing major are from these two states.
2. Set "Elite Club" to attract the top students.

Questions?