# STT 200 - Lecture 1, SECTION 2,4 Recitation 3 (9/18/2012) 

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 Office hour: (C500 WH) 1:45-2:45PM Tuesday (office tel.: 432-3342)Help-room: (A102 WH) 11:20AM-12:30PM, Monday, Friday

Class meet on Tuesday:
3:00-3:50PM A122 WH, Section 02 12:40-1:30PM A322 WH, Section 04

## Overview

- We will discuss following problems:
- Chapter 3: \#25, 32, 38
$\square$ Chapter 4: \#8, 20 25, 26
- All recitation power points available at here
- Chapter 3: \#25:
$\square \%$ of white
$\square \%$ of 2-year college

|  | White | Minority |
| :--- | :---: | :---: |
| 4-year college | 198 | 44 |
| 2-year college | 36 | 6 |
| Military | 4 | 1 |
| Employment | 14 | 3 |
| Other | 16 | 3 |

$\square \%$ of white and 2-year college

- \% of white that are planning 2-year college
$\square \%$ o 2-year college that are white

| $\left.\frac{c}{\frac{c}{00}} \right\rvert\,$ |  | Student | Staff |
| :---: | :---: | :---: | :---: |
|  | American | 107 | 105 |
|  | European | 33 | 12 |
|  | Asian | 55 | 47 |

- Chapter 3: \#32:
$\square \%$ of foreign
$\square \%$ of American cars owned by student
$\square \%$ of students own American cars
$\square$ marginal distribution of origin
$\square$ conditional distribution of origin by driver classification
- Independence? Explain
- Chapter 3: \#32:
$\square$ Technical note:


Answer to the last Q should be "conditional distribution" instead of marginal.

Also, the textbook states, "variables are said to be independent if the conditional distribution of one variable is the SAME for each category of the other." (page 37)

For our class: "If the conditional distributions of one variable is WITHIN $2 \%$ for each category of the other, we will assume that the said percentages are the same, otherwise, they are different."

- Chapter 3: \#38:

|  | Taking SSRI | No SSRI | Total |
| :--- | :---: | :---: | :---: |
| Experienced fractures | 14 | 244 | 258 |
| No fractures | 123 | 4627 | 4750 |
| Total | 137 | 4871 | 5008 |

$\square$ Any associations?

- Chapter 4: \#8:

Heights of singers

$\square$ Description of the distribution. (Modality, modes, outliers, etc.)
$\square$ Account for/explain the features.

- Chapter 4: \#20:

$\square$ Mean close to 14,15 , or 16 inches?
$\square$ Stdev. close to 1,3 , or 5 inches?
Technical note: for a normal distribution, approximately $68.27 \%$ of data fall within 1 stdev from the mean.
- Chapter 4: \#25:

Boss salary: $\$ 200,000$-> $\$ 2,000,000$ by mistake

- Median, mean?
$\square$ range, IQR and stdev?
- Chapter 4: \#26:

Coldest temperature: 36 Fahrenheit -> 2 Celsius value by mistake

Actually: 36 Fahrenheit -> 2.222222 Celsius value

- Median, mean?
- range, IQR and stdev?

